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#### THE CANADA COUNCIL

The Canada Council Programme of Research Grants: An Analysis for 1965/66 to 1968/69



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# THE CANADA COUNCIL

The Canada Council Programme of Research Grants: An Analysis for 1965/66 to 1968/69

Prepared by

Dr. Walter P. Hettich

of the Canada Council and Queen's University

June 1969



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Walter Hettich



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#### INTRODUCTION

Like other Council activities, the programme of research grants has grown rapidly since 1965/66, the first fiscal year for which the Council received funds through parliamentary appropriations. To realize the extent of the expansion, one must recall the small base from which the programme started. In 1964/65 when Council activities were still financed exclusively from endowment income, \$203,000 were awarded for research projects in the social sciences and the humanities. The figure doubled during the following year. By 1968/69, total awards had increased more than tenfold, reaching \$2.9 million:

To borrow a phrase from the economic historians, we have witnessed the programme's "take-off" during the past four years. For governmental programmes, as for national economies, the initial stage of rapid growth is crucial; it is the time when new initiatives are taken and when the pattern of future operation is established. As a result, it is important to have a clear record of events for the period and to analyse the direction which events are taking. The present report attempts to serve such a dual role. It is designed to document the pattern of requests and awards during the programme's take-off phase and, in addition, to throw light on the extent of participation by different groups of social scientists and humanists.

Before proceeding, it may be useful to place the programme in the framework of other Council activities in the social sciences and the humanities.

It is not the largest programme; doctoral fellowships which demanded an expenditure of \$9.3 million in 1968/69 alone have the predominant place.



Nor is it the only programme to assist researchers; leave fellowships and post-doctoral fellowships are also offered. On the other hand, being the major source of funds for freely initiated research in the social sciences and the humanities, the programme is of crucial importance to the development of scholarly work in Canada. In fact, the central position which it occupies gives the pattern of requests and awards significance beyond the programme's operation. No doubt, this pattern provides valuable clues about the overall direction of Canadian research. We realize, of course, that a complete study of research patterns would require much more data than is available; we would need figures not merely on Council programmes but also on the programmes and policies of mission-oriented agencies and, in particular, on the availability of contract research. However, if sufficient care is exercised, interpretation of data on the Council programme can yield useful insights into the characteristics and development of Canadian research.

Before we begin the discussion of the programme, a warning is in order about what the report does <u>not</u> do. It does not deal with the output of scholarly work or other results which can be ascribed to the programme. The main focus is on the number and size of requests and awards. We analyse dollars expended, not articles and books published, and we devote no attention to the improved research content of lectures and courses. Our report is only a first step toward a full programme evaluation. A separate study of broader scope, one which deals with output and results, may well be warranted in addition.

Also excluded are grants under the Killam programme which is administered separately. Such awards are few in numbers, each consisting of a large amount. Their inclusion would distort the pattern of grants in the regular programme.



As pointed out, the report plays a dual role. On the one hand, we have attempted to provide the Council with a complete and fairly detailed historical record of requests and awards, a task requiring the presentation of much statistical material. On the other hand, we try to give an interpretation of the resulting pattern. This dual purpose is reflected in the organization of the text which has been divided into five sections, each ending with numerous statistical tables. Topics which are dealt with include the distribution of requests and awards by disciplines, university and region; the size distribution of grants; success rates; and, finally, variations in programme participation. The report ends with a brief set of concluding remarks.

#### 1. DISTRIBUTION BY DISCIPLINE AND DIVISION

Anybody who has dealt with research applications knows that research work cannot easily be classified according to discipline. Many projects span several traditional disciplines. In other cases one may deal with work breaking new ground both in methodology and subject matter. In spite of these difficulties, most people would admit the usefulness of traditionally defined disciplines as the basis for classifying information. Ordering of the data is necessary to determine changing trends and patterns of distribution, and use of traditional disciplines makes it possible to compare figures on research applications and awards with the population of potential applicants in various fields.

Tables 1.1 and 1.2 show applications and awards, classified by discipline.

Together, they give a comprehensive record of the four-year period, containing information both on dollar amounts and on the number of projects and participating



scholars. It should be noted that projects have been classified according to topic rather than the departmental affiliation of the main researcher.

The list of disciplines on which the tables are based will be used consistently throughout the report. It should not be looked upon as having any particular significance for Council policy or practice, having been designed merely to allow compilation of data in a consistent manner. The categories "other humanities" and "other social sciences" show that the list is far from being complete. They include projects in such fields as business administration, education, journalism and library science as well as projects which are interdisciplinary in character and which cannot easily be assigned to one of the listed disciplines.

The two tables document the rapid increase in both applications and awards in detail. It is clear that all disciplines shared in the expansion with the dollar amounts, the number of projects, and the number of scholars all growing at the same time. One should note that the number of researchers exceeds the number of projects in most disciplines. The Canada Council supports many projects involving the joint efforts of several scholars.

It is interesting to compare disciplines according to the number and size of applications and awards. Since we may expect considerable fluctuations from year to year in any one discipline, such a comparison is best made for the period as a whole. Table 1.3 presents the sums of applications and awards by discipline. Both the number of projects and the total dollar amounts have been ranked according to size. Looking first at projects, one finds history in first place with a total of 384 applications and 316 awards. It is followed by English, sociology, economics and political science. One may note that the



ranking for these disciplines is identical for applications and for awards.

This is a coincidence and differences in rank are well possible as the example of art history demonstrates. Such differences derive from variations in success rates, a topic which will be taken up later in a separate section.

While historians submitted the largest number of projects, they did not request the largest total amount in grants, nor did they receive the greatest sum in awards. When we rank applications and awards in dollars, sociology heads the list. History drops to second place while economics ranks third in applications and fourth in awards. English, formerly the runner-up, is in sixth place. The change in rank is of course related to differences in the cost of doing research, a question which will be dealt with in more detail in a later section where we shall present data on the average size of applications and awards by discipline.

To many people, aggregation of projects by discipline is only a first step. Much of the discussion of grants policy and science policy is carried on in reference to groupings of disciplines. It is useful therefore to distinguish between two broad areas of study - the social sciences and the humanities - and to tabulate applications and awards separately for each one. Besides lending assistance to the general discussion, the use of broad groupings has a second justification. Since a great many applications and awards are involved in each area, year-to-year differences will be affected less by random fluctuations, thus representing true changes in underlying trends.

Table 1.4 gives applications and awards for the humanities and the social sciences. For lack of a better term, this two-way classification is referred



to as a presentation "by division". The table is based on the preceding one with notes at the bottom explaining assignment of disciplines to either category. Since the Dominion Bureau of Statistics, the main source of published Canadian statistics, follows different conventions, it should perhaps be pointed out that we include mathematics among the humanities while linguistics and archaeology are considered social sciences.

The proportion of applications and awards for each area has not changed much over the four-year period. In 1965/66, 19.5 per cent of applications and 20.1 per cent of awards in dollars involved the humanities. Four years later, the figures were 20.3 and 23.0 per cent (Table 1.5). The share of the humanities rose temporarily in the intervening years, but on the whole the percentage figures seem to point to a stable relationship. The same holds true when we consider the number of projects in each division rather than the dollar amounts. Here in fact, the relative shares deviate even less. In 1965/66, 37.8 per cent of all projects submitted and 39.8 per cent of all projects approved were to be carried out by humanists. In 1968/69, the corresponding percentages were 36.9 and 37.7.

The observed stability in the percentage distribution is quite remarkable when the very high rates of growth in the programme are taken into account.

Table 1.6 shows percentage increases from year to year and for the whole period.

Overall, the number of applications grew by 401 per cent while the number of awards increased by 434 per cent. Calculated in dollar terms, growth is even greater, a fact indicating that both the number and the average size of projects increased. For the four-year period, applications in dollars rose by 684 per cent and awards - not far behind - increased by 603 per cent.



Figures for the whole period disguise an important phenomenon. While very high from the first to the second year, the rate of increase dropped in subsequent years. The drop is most noticeable between the second and third years when growth is calculated on the basis of applications and between the third and fourth years when we look at the increase in dollar amounts. While there is considerable variation in the rate of growth for the two divisions, the changes tend to move in the same direction. The discussion in Section Four, which will deal with the relation of successful to total applications, i.e., with the rate of success, can be expected to throw further light on the forces behind Table 1.6.



Table 1.1

Research Grants 1965/66 - 1968/69 by Discipline

Applications and Awards in \$

	1965/66	99/	1966/67	167	1967/68	/68	I968	T968/69
	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
	1	ı	58,757	57,257	145,051	107,716	225,118	163,969
	3,000	3,000	35,072	33,572	10,673	10,673	65,754	43,286
	1	ı	9,375	9,375	58,850	7,150	32,595	11,645
	85,789	56,750	99,235	84,785	178,802	133,419	990,949	263,282
e Arts Architecture Art History Music	5,710 2,900 9,155	5,710 1,400 5,355	5,800 39,540 12,600	1,400 19,300 9,300	59,934 71,238 10,375	15,734 61,062 10,375	35,691 58,898 65,726	9,836 49,161 55,450
	3,350	1,850	89,208	34,059	118,428	85,654	240,352	161,657
	28,333	22,028	153,884	101,487	314,818	246,694	481,775	368,837
Industrial Relations	677,7	1	15,600	15,600	14,000	14,000	1	ı
Language & Literature Asian Classics	12,000	10,500	3,000	1,500	18,660	17,160	43,716 54,422	40,844
	30,695	26,350	82,793	33,343	200,127	176,020	271,736	222,923
	884	488	14,415	14,415	38,946	38,946	33,302	21,905
	3,000	1,500	2,000	2,000	9,402	9,405	11,300	11,300
(Russian)	3,850	2,350	6,850	4,300	18,516	15,458	30,647	24,859
	3,750	3,750	15,395	14,695	17,377	14,977	44,946	37,374

See notes on next page.



Table 1.1 (cont.)

	1965/66	99,	1966/67	57	1967/68	/68	1968/69	69/
Discipline	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
<u>Law</u>	11,500	11,500	21,525	16,525	85,400	85,400	175,517	171,882
Linguistics	27,335	22,335	71,553	69,289	94,823	81,061	261,934	212,986
Mathematics	2,953	2,953	25,650	25,650	50,400	50,400	7,755	4,355
Philosophy	5,820	4,630	43,637	36,937	83,846	68,519	63,507	46,319
Political Science	48,612	46,558	63,726	57,125	352,324	284,420	293,000	209,289
Social Psychology	17,376	13,676	121,223	95,430	224,596	181,266	313,419	243,300
Sociology	180,000	141,450	265,333	151,810	361,850	218,264	639,062	378,370
Other Humanities	),,,,,,,	)	16,461	9,361	51,150	26,435	11,122	5,322
Other Social Sciences	(27,240	(13,000	35,747	12,537	96,338	50,743	47,302	7,912
TOTAL	531,491	412,794	1,376,214	983,000	2,785,199	2,101,853	4,168,993	2,903,558

Notes: Grants are listed under the fiscal year in which they were awarded.

The categories "Other Humanities" and "Other Social Sciences" contain projects of an interdisciplinary nature as well as some projects in disciplines not listed separately. Projects in Business Administration and as well as some projects in disciplines not listed separately, Education are included in "Other Social Sciences".



Table 1.2

Research Grants 1965/66 - 1968/69 by Discipline

Number of Applications, Applicants, and Awards

		1965/66		1966/67				967/	68		1968/69				
Discipline	Number of Projects Submitted	Number of Projects Approved	Number of Projects	Submitted	Number of Projects	Approved	4	Submitted	Number of Projects	Approved	Number of Projects	Submitted	Number of Projects	Approved	
Anthropology			(16)	12	(15)	11	(19)	17	(15)	15	(38)	34	(31)	27	
Archaeology	2	2	(9)	9	(8)	8	(5)	5	(5)	5	(18)	16	(14)	14	
Demography			(2)	2	(2)	2	(7)	3	(2)	2	(8)	7	(5)	5	
Economics	28	23	(37)	32	(30)	27	(41)	34	(35)	28	(84)	70	(71)	59	
Fine Arts Architecture Art History Music	4 2 2	4 1 2	(5) (26) (10)	5 24 10	(1) (11) (7)	1 9 7	(10) (16) (6)	10 16 6	(5) (14) (6)	5 14 6	(9) (22) (16)	9 22 11	(5) (19) (15)	5 19 10	
Geography	3	2	(26)	26	(17)	17	(31)	27	(22)	22	(41)	35	(31)	27	
History	21	15	(91)	90	(61)	61	(116)	106	(103)	92	(170)	167	(151)	148	
Industrial Relations	1		(2)	2	(2)	2	(4)	1	(4)	1					
Language & Literature Asian Classics English French German Italian Slavic (Russian) Spanish	1 2 26 10 2 1 3 3		(2) (13) (62) (40) (1) (10) (3) (8)	2 13 60 40 1 10 3 8	(1) (9) (44) (24) (1) (10) (2) (7)	1 9 42 24 1 10 2 7	(4) (10) (99) (43) (17) (4) (9) (9)	4 10 97 43 17 4 9	(3) (10) (93) (42) (17) (4) (7) (8)	3 10 91 42 17 4 7 8	(10) (24) (117) (54) (20) (4) (14) (20)	10 22 114 54 20 4 14 19	(8) (22) (101) (51) (16) (4) (13) (17)	8 20 98 51 16 4 13	
Law	4	4	(12)	10	(9)	7	(12)	9	(12)	9	(25)	20	(24)	19	
Linguistics	6	6	(13)	10	(11)	8	(15)	13	(11)	11	(36)	35	(30)	29	
Mathematics	2	2	(2)	2	(2)	2	(2)	2	(2)	2	(2)	2	(1)	1	
Philosophy	4	3	(28)	28	(21)	21	(37)	35	(31)	31	(27)	27	(23)	23	
Political Science	13	12	(28)	28	(21)	21	(64)	61	(54)	51	(61)	54	(49)	43	
Social Psychology	8	5	(28)	26	(17)	15	(39)	35	(34)	30	(44)	42	(36)	34	

See note on next page.



Table 1.2 (cont.)

	1965	/66	1966/67					1967/	68			1968,	/69	
Discipline	Number of Projects Submitted	1 1 01	Number of Projects	Submitted	Number of Projects	Approved	Number of Projects	Submitted	Number of Projects	3 (1)	Number of Projects	i,		Projects Approved
Sociology	20	15	(52)	50	(28)	26	(80)	66	(60)	51	(91)	82	(73)	66
Other Humanities	( 12	( 9	(12)	12	(7)	7	(11)	10	(8)	7	(5)	5	(3)	3
Other Social Sciences	( 12 (	( 9	(15)	12	(3)	2	(25)	22	(18)	15	(7)	7	(4)	4
TOTAL	<u>180</u>	<u>143</u>	( <u>553</u> )	527	( <u>371</u> )	350	( <u>735</u> )	671	( <u>625</u> )	579	( <u>967</u> )	902	( <u>817</u> )	763

Notes: Figures in brackets represent the number of researchers involved. Such figures are not available for 1965/66.

The categories "Other Humanities" and "Other Social Sciences" contain projects of an interdisciplinary nature as well as some projects in disciplines not listed separately.



Table 1.3

Research Grants 1965/66 - 1968/69

Sum of Applications and Awards by Discipline

	App	lications	Ra	nk		Awards	Ra	ınk
Discipline	Total No. of Projects	Sum of Applications in \$	Col. 1	Col. 2	Total No. of Projects	Sum of Awards in \$	Col. 5	Col. 6
Anthropology	63	428,926	12	9	53	328,942	11	8
Archaeology	32	114,499	17	15	29	90,531	17	15
Demography	12	100,820	22	17	9	28,170	23	25
Economics	164	909,892	4	3	137	538,236	4	4
Fine Arts Architecture Art History Music	28 64 29	107,135 172,576 97,856	19 11 18	16 14 18	15 43 25	32,680 130,923 80,480	21 13 18	23 14 17
Geography	91	451,338	9	8	68	283,220	9	10
History	384	978,810	1	2	316	739,046	1	2
Industrial Relations	4	34,049	24	25	3	29,600	25	24
Language & Literature Asian Classics English French German Italian Slavic (Russian) Spanish	17 47 297 147 40 19 29 39	77,376 89,868 585,351 256,785 87,547 25,702 59,863 81,468	21 13 2 6 15 20 18 16	23 19 6 12 20 26 24 22	13 40 253 124 35 19 24 35	70,004 76,033 485,961 205,575 76,150 24,202 46,967 70,796	22 14 2 6 16 20 19 16	21 19 6 11 18 26 22 20
Law	43	293,942	14	10	39	285,307	15	9
Linguistics	64	455,645	11	7	54	385,671	10	7
Mathematics	8	86,758	23	21	7	83,358	24	16
Philosophy	94	196,810	8	13	78	156,405	8	12
Political Science	156	757,662	5	4	127	597,392	5	3
Social Psychology	111	676,614	7	5	84	533,672	7	5
Sociology	218	1,446,245	3	1	158	889,894	3	1
Other	80	288,360	10	11	47	131,990	12	13
	1			1	1			

Notes: Among applications, Art History and Linguistics are in 11th place with 64 applications each while Music and Slavic (Russian) are in 18th place with 29 applications each.

8,861,897

6,401,205

Among awards, German and Spanish are in 16th place with 35 awards each.

2,280

TOTAL

The category "Other" contains Other Humanities and Other Social Sciences. See Table 1.1 for definition of terms.



Table 1.4

# Research Grants 1965/66 - 1968/69 by Division

Applications and Awards in \$

	1965/66	99/	1966/67	/67	1967/68	89/	1968/69	69/
Division	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
Himoni +ioc 1	103 537	82 007	367 988	27.7, 17.0	376 362	505 303	87.7 000	667 17.3
manualit cres	10000	02,377	0.00,44.0	(+16++7	047,07/	000,000	041,000	007,140
Social Sciences 2	427,954	329,797	1,039,788	738,851	2,058,953	1,506,460	3,321,894	2,236,415
Total	531,491	412,794	1,376,214	983,000	2,785,199	2,101,853	4,168,993	2,903,558

Number of Applications, Applicants, and Awards  $^{3}$ 

	1965/66	99/	1966/67	167	1967/68	89/	1968/69	69/
Division	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
Humanities	(n.a.) 68 (n.a.	(n.a.) 56	(222) 218	(147) 143	(277) 272	(250) 247	(344) 333	(298) 288
Social Sciences	(n.a.) 112	(n.a.) 87	(331) 309	(224) 207	(458) 399	(375) 332	(623) 569	(519) 475
Total	(n.a.) 180	(n.a.) 143	(553) 527	(371) 350	(735) 671	(625) 579	(967) 902	(817) 763

Includes Fine Arts, Language and Literature, Mathematics, Philosophy, and Other Humanities. Notes: 1

Includes Anthropology, Archaeology, Demography, Economics, Geography, History, Industrial Relations, Law, Linguistics, Political Science, Social Psychology, Sociology, and Other Social Sciences. 2

Figures in brackets represent the number of researchers involved



Table 1.5

Research Grants 1965/66 - 1968/69

## Percentage Distribution by Division

Percentage Distribution of Applications and Awards in \$

69.	Awards	%	23.0	77.0	100.0
1968/69	Applica- tions	%	20.3	7.67	100.0
/68	Awards	%	28.3	71.7	100.0
1967/68	Applica- tions	%	26.1	73.9	100.0
167	Awards	%	24.8	75.2	100.0
1966/67	Applica- tions	%	24.4	75.6	100,0
99	Awards	%	20.1	79.9	100.0
1965/66	Applica- tions	%	19,5	80.5	100.0
	Division		* Humanities	Social Sciences*	<u>Total</u>

Percentage Distribution of the Number of Applications and Awards

AND THE REAL PROPERTY OF THE P	1965/66	99	1966/67	19,	1967/68	89,	1968/69	69,
Division	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
	%	%	%	%	%	%	%	%
* Humanities	37.8	39.2	41.4	6°07	40.5	42.7	36.9	37.7
Social Sciences	62.2	8.09	58.6	59,1	59.5	57.3	63.1	62.3
Total	100.0	100.0	100.0	100.0	100,0	100.0	100.0	100.0

 $\ensuremath{^{\ast}}$  See Table 1.3 for definition of terms.



Research Grants 1965/66 - 1968/69

Table 1.6

Percentage Increase by Division

Increase in the \$ Value of Applications and Awards

	1965/66 - 1966/67	1966/67	1966/67 - 1967/68	. 1967/68	1967/68 - 1968/69	1968/69	1965/66 -	1965/66 - 1968/69
Division	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
	%	%	%	%	%	%	%	%
Humanities*	224.9	194.2	115.9	143.9	16.6	12.1	718.2	703.8
Social Sciences	143.0	124.0	0.86	103.9	61.3	48.5	676.2	578.1
Total	158.9	138.1	102.4	113.8	49.7	38.1	684.4	603.4

Increase in the Number of Applications and Awards

	1965/66 - 19	1966/67	1966/67 - 1967/68	1967/68	1967/68 - 1968/69	1968/69	1965/66 - 1968/69	1968/69
Division	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
	%	%	%	%	%	%	9/2	%
Humanities*	220.6	155.4	24.8	72.7	22.4	16.6	389.7	414.3
Social Sciences	175.9	137.9	29.1	4.09	42.6	43.1	0.804	0.944
Total	192.8	144.8	27.3	65.4	34.4	31.8	401.1	433.6

\* See Table 1.3 for definition of terms.



### 2. DISTRIBUTION BY UNIVERSITY AND REGION

The Canada Council supports the work of scholars through its programme of research grants; the programme is not aimed at universities or educational institutions as such. Nevertheless, the great majority of applicants are university teachers with a professional affiliation to a Canadian university or college, and it is useful, both for the Council and for the universities, to have a list of grants classified by institution of affiliation. Tables 2.1 and 2.2 summarize data on applications and awards on this basis. All AUCC member institutions from which a request originated are listed by name. Data on other post-secondary educational institutions are given in summary form by province. All applications and awards involving researchers not affiliated with a Canadian institution of higher education have been grouped together in the category "other" at the bottom of the tables.

The data on particular institutions are difficult to interpret. For most universities and colleges, the total number of applications and awards is small in any given year. Random factors can have a substantial influence, and success or failure of a particular project can affect the figures substantially. While the data in Tables 2.1 and 2.2 no doubt could be used to throw light on the flourishing of free research in various institutions, one would need a great deal of supplementary information on each university in order to give a proper interpretation. Attempting no such thing, we merely rank all institutions according to the total number of projects submitted and the sum of applications and awards in dollars over the four-year period. The results, contained in Table 2.3, lead to an understanding of where the major centers of research in the social sciences and the humanities are located.



As would be expected, the University of Toronto heads the list. If we rank institutions according to the total number of projects submitted, Toronto is followed by McGill, British Columbia, Montreal, Alberta, York, Manitoba, Western Ontario, Queen's and Calgary. The sequence differs slightly if dollar amounts or the number of awards are used as a basis for ranking with Laval and Waterloo joinning the top ten universities. There is considerable concentration of research among the first ten - they account for 57 per cent of all successful projects and 65 per cent of the total amount awarded during the period.

The development of universities, while influenced by the programmes of the federal research councils, is determined mainly by provincial policies. In a paper on the growth of university teaching staff<sup>1</sup>, it was shown that rates of development differed considerably among the major regions. Because of the strong link between the demand for grants and the growth of university staff, it is interesting to study the changing regional pattern of applications and awards.

Table 2.4 provides the basis for a discussion of the regional pattern.

A distinction is made between grants to researchers affiliated with a Canadian institution of higher education and grants to scholars having no such affiliation.

University research has been broken down by region for each of the four years.

The implications of the regional pattern are more easily understood by looking at the changing percentage distribution. Table 2.5 gives the share of each region in annual applications and awards. Table 2.6 throws light on the same question by showing rates of increase in applications and awards.

<sup>&</sup>lt;sup>1</sup> "Growth and Characteristics of University Teaching Staff in the Social Sciences and the Humanities 1956-57 to 1967-68," a Report by the Canada Council, prepared by Dr. Walter P. Hettich. May 1969.



Together, they reveal an interesting pattern. Researchers in British Columbia and the Prairies increased their participation and their share in the programme substantially. In 1965/66, applications from the Western provinces amounted to 20.5 per cent of all projects submitted and 13.2 per cent of total dollars requested. By 1968/69, these figures had risen to 27.4 and 28.6 per cent. Quebec's participation, on the other hand, showed a relative decline. Applications from Quebec fell from 25.6 (40.1) per cent in 1965/66 to 15.4 (21.6) per cent in 1968/69. The drop occurred in the first half of the period and a new stable level seems to have been reached in the last two years. shares of both Ontario and the Atlantic provinces showed little change. Ontario, with the largest and best-qualified teaching force, has a predominant place among regions. It is interesting to note the correspondence between rates of growth in research applications and rates of growth in the number of university teachers. The separate study already mentioned did reveal a substantially greater percentage increase of staff in the West than in the other regions. One would expect this surging ahead to be a temporary phenomenon although such an assumption is no more than speculation at this time. Finally, the tables throw some light on the participation of researchers not affiliated with educational institutions. The share of this group has remained fairly stable over the four-year period, oscillating around a figure of six per cent. While important work is no doubt done by unaffiliated researchers, it is clear from the data that the major demand for Council support comes from the university community.



Research Grants 1965/66 - 1968/69 by University of Affiliation

Applications and Awards in \$

University of	1965/66	99	1966/67	19	1967/68	89/	1968/	69/
Affiliation	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
BRITISH COLUMBIA								
British Columbia	10,353	10,353	140,185	88,898	118,074	99,426	231,979	145,333
Notre Dame		ı	1	ŧ	ŧ	ı	2,000	1,920
Simon Fraser	ı	1	697,9	- 0	58,396	40,742	84,937	57,983
Victoria	2,690	1,500	20,969	20,969	28,245	96	96,732	64,128
Other post-secondary	ı	ŧ	1,900	-	400	400	3,650	3,650
PRAIRIES								
Alberta	12,855	9,250	51,492	20,802	198,451	151,031	405,651	190,805
Brandon	1	1	007	1	- 0	007	ŧ	1
Calgary	ı	ı	34,433	24,533	124,601	87,850	1	109,440
Lethbridge	ı	1	5,143	1		5,350	, 1	7,300
Manitoba	19,840	14,235	75,092	33,216		- 0	5,	68,255
St. Paul's	1	1	1	ı	1	1	1	ı
Saskatchewan	24,699	14,900	4	11,307	46,385	38,385	,92	28,026
Winnipeg	1	ı	1,970	1	ı	1	0	1
ONTARIO								
Brock	8	1	,55	1,550	37,587	4,202	n	14,67
Carleton	24,550	23,550	17,210	15,310	805	32,324	170,	100,748
Guelph	8	1	6,32	$\overline{}$	,974	29,919	36,	29,683
Lakehead	1		,35	1,000	,200	4,200	က်	
Laurentian	7,800	4,000	ŝ		,436	9,281	55,	37,763
McMaster	4,500	4,500	50	11,700	417	91,254	84,	63,483
Ottawa	12,130	9,650	0.	00	,583	63,580	98,	77,076
Saint Paul	ı	1	1	ı	050	3,050	ကိ	1,900
Queen's	429,99	54,505	10	٦	904	142,406	130,	97,766
Royal Military College	2,288	2,288	4,825	1,825	,061	4,061	6	9,528
Toronto	34,024	29,524	194,579	0,	,443	254,443	436,	395,421
St. Michael's	1	2	1,894	,89	750	2,750	4,	4,022
Trinity	ŧ	1	ı	ı		ı	ຕົ	3,976
Victoria	1	ı	0	1	7,356	7,356	- 6	18,406
Trent	1,500	1,500	15,795	14,295	,04	,04	S	23,593



## Applica - Awards Applica - Awards tions	University of	T965/66	99,	1966/6	/67	196	89/198	1968,	8/69
bernan 1, 400 5,400 51,190 45,790 81,805 74,960 154,320 95  leteran 1,4626 12,526 87,069 84,069 103,772 9,472 88,398 84,180  ccondary 1,500 1,500 9,022 1,102 1,102 1,002 1,002 1,002 1,102 1,003 1,102 1,102 1,102 1,103 1,10	Affiliation		Awards	(C) (N)	Awards	() (n	Awards	s c	Awards
From the content of	ONTARIO (cont.)	L	i i	,	C F				1 (
From the contact of t	Waterloo	2,400	2,400	J é	5,79	1,80	4,96	54,32	99,985
Liboo Lutheran	St. Jerome's	ŧ	1		ŧ	1		,50	2,500
rem Ontario   14,626   12,526   87,069   84,069   103,772   99,472   88,398   84,000   1,500   1,500   13,250   9,022   23,676   23,676   21,7409   1,300   1,500   1,	Waterloo Lutheran	ı	ı	100	1,400	0,3	2	3,33	2,904
rost-secondary 1,500 1,5	Western Ontario	14,626	12,526	7	4,	03,7	9;4	8,39	4,
ser 3,000 1,500 13,550 9,022 23,676 23,676 23,678 29,736 29, 143, 1500 1,500 1,500 1,500 16,170 16,170 16,170 2,900 143, 1500 1,500	Huron		1	1	ı	7	1,1	00,	
r post-secondary 1,500 1,530 29,547 25,007 211,764 177,260 217,409 143, 150 1,500 1,	Windsor	3,000	1,500	3,25	- 0	3,6	3,6	9,73	9,53
r post-secondary 1,500 1,500 9,800 8,300 16,170 16,170 2,900 1,000	York	26,535	24,535	9,54	5,	11,7	77,2	17,40	43,3
pp's  1		1,500	1,500	9,80	00	16,1	6,1	2,90	1,45
pp's = 1,580	QUEBEC								
11	Bishop's	8	ı	5	7	ä	ì	,39	,81
111	Laval	26,558	25,083	5,5	0,9	01,98	3,11	9,34	,31
treal 113,400 82,700 131,884 110,199 243,850 124,514 356,632 289, any obvola	McGill	71,719	50,580	7,9	5,2	59,69	9,13	87,19	260,157
oyola arianpolis 3,800 3,800 2,775 2,775 16,051 16, 51	Montreal	113,400	82,700	31,8	10,1	43,85	4,51	56,63	,32
arianopolis 2,200 8,275	Loyola	ı	ı	$\infty$	00	77	,77	6,05	0.5
rbrooke	Marianopolis	ı	ı	2,2	1			8,27	,41
George Williams 1,400 1,400 30,214 17,335 25,222 10,032 93,842 14, ser post-secondary - 1,700 1,700 1,700 - 2,202 2,900 29,415 20,285 24,441 21, ser bousie 1,000 - 2,700 2,200 4,945 1,900 41,891 5,000 1,200 2,326 2,326 2,326 4,220 4,1891 5,000 1,200 2,326 2,326 2,326 4,220 4,1891 5,000 1,200 2,326 2	Sherbrooke	1	ı	9,7	7,70	3,61	3,61	7,60	,75
rrrc dia bousie	Sir George Williams	1,400	1,400	0,21	7,33	5,22	0,03	3,84	9
tic dia housie	Other post-secondary	1	ı	, 70	, 70	I	i	,04	04
dia bousie 5,398 4,098 4,250 2,900 29,415 20,285 24,441 21, 21, 21, 200 1,000 4,945 1,000 4,945 1,000 4,945 1,900 44,891 5, 21, 21, 22, 2326 2,326 2,326 4,220 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 4,320 1,200 2,326 18, a Scotia echnical College	ATLANTIC								
bousie 5,398 4,098 4,250 2,900 29,415 20,285 24,441 21,  orial 1,000 - 8,480 2,980 17,600 10,100 46,310 43,  cton - 2,700 2,200 4,945 1,900 41,891 5,  nt Allison 950 1,200 1,200 2,326 4,220 4,220 4,220 4,220 4,220 4,220 4,220 4,220 2,326 2,326 2,326 18,  Brunswick 8,132 7,382 8,800 5,800 36,877 16,527 20,656 18,  a Scotia echnical College - 2,400 2,400 2,400 - 5,280 3,780 7,148 4,194 1,271 1,  Francis Kavier 885 - 4,000 - 2,200 1,400 2,500 - 2,200 1,400 2,500 - 2,200 1,400 2,500 - 2,200 1,400 2,500 - 2,200 1,400 2,500 1,77  er post-secondary - 2,708 15,385 85,058 30,925 206,371 83,024 282,560 177,  531,491 412,794 1,376,214 983,000 2,785,199 2,101,853 4,168,993 2,903,	Acadia	i	ŧ	ŧ				,49	,49
orial 1,000 - 8,480 2,980 17,600 10,100 46,310 43,  cton - 2,700 2,200 4,945 1,900 41,891 5,  Brunswick 8,132 7,382 8,800 5,800 36,877 16,527 20,656 18,  a Scotia	Dalhousie	5,398	4,098	4,250	2,900	9	0,2	4,44	$\Box$
ton  the Allison  general college  echnical College  recoff Wales  recoff Wary's  recoff wars, secondary  2,306  1,200  2,326  2,326  4,220  4,220  4,220  4,220  18,300  2,326  2,326  2,326  2,326  4,220  18,300  2,400  2,400  2,400  2,400  1,271  2,200  1,271  2,200  1,200  2,785,199  2,101,853  4,168,993  2,903,	Memorial	1,000	ı	8,480	2,980	7	0,1	6,31	3,31
nt Allison 950 950 1,200 1,200 2,326 2,326 4,220 4,  Brunswick 8,132 7,382 8,800 5,800 36,877 16,527 20,656 18,  a Scotia echnical College -	Moncton	1	ı	2,700	2,200	- 0	0	1,89	00,
Brunswick 8,132 7,382 8,800 5,800 36,877 16,527 20,656 18, a Scotia echnical College 4,194 4,194 nce of Wales 5,280 3,780 7,148 4, brancis Xavier - 885 - 4,000 - 2,200 1,400 2,500 - 2,500 1,77, er post-secondary 2,204 1,376,214 983,000 2,785,199 2,101,853 4,168,993 2,903,	Mount Allison	950	950	1,200	1,200	~	2,3	,22	2
a Scotia echnical College 4,194 4,194 2,400 2,400 2,400 7,148 4, nce of Wales 5,280 3,780 7,148 4, Francis Xavier - 885 2,200 1,400 2,500 1,71 1, nt Mary's 2,200 1,400 2,500 1,71 83,024 282,560 177, er post-secondary 2,200 2,785,199 2,101,853 4,168,993 2,903,	New Brunswick	8,132	7,382	8,800	5,800	6,	6,5	0,65	8,84
echnical College 4,194 4,194 - 194	Nova Scotia								
ree of Wales 2,400 2,400 - 7,148 4,  Francis Xavier - 65,280 3,780 7,148 4,  In Mary's 4,000 - 800 1,271 1,  er post-secondary 2,200 1,400 2,500 - 2,500 1,77,  S31,491 412,794 1,376,214 983,000 2,785,199 2,101,853 4,168,993 2,903,	Technical College	1	ı	ı	1	•	4,194	1	ı
Francis Xavier 5,280 3,780 7,148 4,  nt Mary's	Prince of Wales	1	ı	1	ı	Ph.	2,400		
er post-secondary - 4,000 - 800   1,271   1,	St. Francis Xavier		t	1	ı	0.	3,780	0	4,374
er post-secondary 2,200 1,400 2,500 2,500 1,400 2,500 - 2,500 177, 83,024 282,560 177, 83,024 282,560 177, 83,024 2,101,853 4,168,993 2,903,	Saint Mary's	885	1	7,000	1		800		- 0
27,085     15,385     85,058     30,925     206,371     83,024     282,560     177,       531,491     412,794     1,376,214     983,000     2,785,199     2,101,853     4,168,993     2,903,	Other post-secondary	ŧ	ŧ	1	ŧ	2	60	-	
531,491 $412,794$ $1,376,214$ $983,000$ $2,785,199$ $2,101,853$ $4,168,993$ $2,903,$	OTHER	27,085	15,385	85,058	30,925	,37	,02	82,56	177,713
	TOTAL	531,491	412,794	,376,	983,000	5,19	101,85	68,99	2,903,558

The category "Other" contains grants to scholars who, at the time of their application, were not affiliated with a Canadian institution of higher education. Notes: Grants are listed under the fiscal year in which they were awarded.



Table 2.2

Research Grants 1965/66 - 1968/69 by University of Affiliation

Number of Applications, Applicants and Awards

			l				1							
	1965/	66		1966	/67			196	7/68			1968	/69	
University of Affiliation	Number of Projects Submitted	Number of Projects Approved	Number of	Submitted	Number of Projects	Approved	Number of Projects	Submitted	Number of Projects	Approved	Number of Projects	t t	Number of Projects	Approved
BRITISH COLUMBIA British Columbia Notre Dame Simon Fraser Victoria Other post-secondary	7 - 2 -	7 - 1	(40) - (2) (7) (2)	38 - 2 7 2	(31) - (2) (7) (2)	29 - 2 7 2	(40) - (21) (7) (1)	39 - 18 7 1	(36) - (16) (5) (1)	35 - 16 5	(63) (1) (30) (18) (2)	60 1 30 18 2	(55) (1) (23) (13) (2)	54 1 23 13 2
PRAIRIES Alberta Brandon Calgary Lethbridge Manitoba St. Paul's Saskatchewan Winnipeg	8 - - 13 - 7 -	6 - - 8 - 5	(17) (1) (9) (1) (35) - (21) (2)	16 1 9 1 32 - 21 2	(13) - (7) - (18) - (9)	12 7 - 17 - 9	(36) (2) (40) (5) (26) - (21)	32 2 40 5 24 -	(29) (1) (32) (4) (20) - (18)	29 1 32 4 19 -	(58) - (39) (4) (22) (1) (21) (2)	49 - 38 4 21 1 21 2	(40) - (33) (3) (17) - (14)	34 - 32 3 17 - 14
ONTARIO  Brock Carleton Guelph Lakehead Laurentian McMaster Ottawa Saint Paul Queen's Royal Military College Toronto St. Michael's Trinity Victoria Trent Waterloo St. Jerome's Waterloo Lutheran Western Ontario Huron Windsor York Other post-secondary	- 6 - 1 3 7 - 16 2 17 1 4 8 - 2 2 1	- 5 - 1 3 5 - 16 2 15 - 1 4 - 6 - 1 2	(1) (12) (6) (3) (- (13) (15) - (12) (4) (65) (1) - (1) (8) (24) - (1) (15) - (12) (21) (21) (21)	1 12 6 3 14 - 12 4 60 1 - 1 8 24 - 1 1 3 - 1 2 1 2 1 2 2 1 2 2 1 2 2 2 2 2 2 2 2	(1) (10) (3) (1) - (9) (8) (12) (2) (53) (1) - (1) (20) - (1) (13) - (8) (16) (1)	1 10 3 1 - 9 8 - 12 2 48 1 - 7 20 - 11 - 8 16 1	(5) (18) (16) (1) (21) (22) (2) (34) (3) (68) (1) (2) (5) (23) (35) (1) (11) (41) (41)	5 15 16 1 4 19 21 2 29 3 64 1 - 2 5 23 - 3 3 2 1 9 3 2 1	(3) (17) (13) (1) (3) (17) (18) (2) (34) (3) (68) (1) - (2) (5) (22) - (1) (34) (1) (11) (35) (4)	3 14 13 1 7 17 17 2 29 3 64 1 - 2 5 22 - 1 31 1 9 26 4	(4) (31) (18) (2) (11) (28) (34) (2) (39) (7) (104) (2) (11) (14) (31) (1) (2) (35) (1) (17) (44) (2)	4 29 18 2 8 27 31 2 32 7 100 2 2 11 14 30 1 2 35 1 15 38 2	(4) (27) (14) - (10) (26) (32) (1) (36) (7) (99) (2) (2) (10) (13) (26) (1) (2) (33) - (15) (39) (1)	4 26 14 - 7 25 29 1 29 7 95 2 2 10 13 25 1 2 33 - 13 35 1

See notes on next page.

../



Table 2.2 (cont.)

	1965/	/66		1966	/67			1967	/68			1968	/69	
University of Affiliation	Number of Projects Submitted	Number of Projects Approved	4	Submitted	Number of Projects	Approved	Number of Projects	Submitted	Number of Projects	Approved	Number of Projects	Submitted	Number of Projects	Approved
QUEBEC  Bishop's  Laval  McGill  Montreal  Loyola  Marianopolis  Sherbrooke  Sir George Williams  Other post-secondary	- 11 22 12 - - 1	- 10 18 9 - - 1	(1) (28) (23) (36) (3) (2) (6) (13) (2)	1 24 21 34 3 2 4 13 2	(1) (15) (20) (27) (3) - (5) (7) (2)	1, 13, 18, 25, 3, -, 3, 7, 2,	(15) (52) (46) (3) - (5) (7)	- 15 49 33 3 - 3 7	(14) (44) (32) (3) - (5) (4)	- 14 42 26 3 - 3 4	(5) (2) (2) (9) (4)	4 19 56 38 5 2 2 9 4	(3) (18) (58) (39) (5) (1) (1) (5) (4)	3 17 50 35 5 1 1 5
Acadia Dalhousie Memorial Moncton Mount Allison New Brunswick Nova Scotia Technical Prince of Wales St. Francis Xavier Saint Mary's Other post-secondary	- 4 1 7 - 1	- 3 - 1 6 - -	(3) (7) (3) (2) (6) - (3)	- 3 7 3 2 6 - - 3	(2) (3) (2) (2) (4) -	2 3 2 4	(5) (2) (1) (13) (2) (1) (3) (1) (1)	8 5 2 1 13 2 1 3 1	(7) (4) (1) (1) (12) (2) (1) (2) (1) (1)	7 4 1 1 12 2 1 2	(1) (10) (14) (4) (2) (14) - (3) (2) (1)	1 10 10 4 2 14 - 3 2	(1) (9) (13) (2) (2) (13) - (2) (2)	1 9 9 2 2 13
OTHER	13 180	6 143	(62) ( <u>553</u> )	60 <u>527</u>	(23) ( <u>371</u> )	21 <u>350</u>	(51) ( <u>735</u> )	44 <u>671</u>	(34) ( <u>625</u> )	27 <u>579</u>	(59) ( <u>967</u> )	56 <u>902</u>	(38) ( <u>817</u> )	35 <u>763</u>

Notes: Figures in brackets represent the number of researchers involved.

The category "Other" contains grants to scholars who, at the time of their application, were not affiliated with a Canadian institution of higher education.



<u>Table 2.3</u>

Research Grants 1965/66 - 1968/69

### Sum of Applications and Awards by University of Affiliation

	App1	ications	Ra	nk		Awards	Ra	ınk
University of Affiliation	Total No.	Sum of Applications in \$	Col. 1	Col. 2	Total No. of Projects	Sum of Awards in \$	Co1. 5	Col. 6
BRITISH COLUMBIA	1//	500 501	,		1.05	0// 010		
British Columbia	144	500,591	34	6 47	125	344,010	3 3 4	45
Notre Dame Simon Fraser	50	2,000 149,802	17	19	1 41	1,920 105,194	17	17
Victoria	34	148,636	20	20	26	112,277	21	18
Other post-secondary British		140,000	20	20		112,277	- 1	
Columbia	5	5,950	30	42	5	5,950	30	39
PRAIRIES								
Alberta	105	668,449	6	3	81	371,888	8	4
Brandon	3	1,800	32	48	1	400	34	47
Calgary	87	299,167	11	11	71	221,823	11	12
Lethbridge	10	25,047		32	7	12,650	28	32
Manitoba	90	326,028 4,130	8 -	9	61	166,646	13	16
St. Paul's Saskatchewan	70	169,148	14	17	46	92,618	16	20
Winnipeg	4	5,970	31	41	-	-	35	48
ONTARIO								
Brock	10	71,817	26	27	8	20,422	27	30
Carleton	62	245,935	16	14	55	171,932	14	13
Gue 1ph	40	109,261	18	21	30	70,877	20	2
Lakehead	6	9,626	29	37	2	5,200	33	4(
Laurentian	13	74,539	25	24	11	51,044	26	24
McMaster	62	217,970	16	16	54	170,937	15	14
Ottawa	73	235,427	13	15	59	164,158	12	1 1 5
Saint Paul	89	6,450 374,300		8	86	4,950 3 <b>2</b> 9,783	6	
Queen's Royal Military College	16	20,702		33	14	17,702	25	3
Toronto	241	919,940		1	222	858,431	1	
St. Michael's	4	8,666	_	-	4	8,666	_	
Trinity	2	3,976	-	-	2	3,976	-	
Victoria	14	28,592	-	-	12	25,762	-	
Trent	28	67,433	21	28	26	47,433	21	2
Waterloo	81	292,715	12	13	71	226,135	10	1
St. Jerome's	1	2,500	-	-	1	2,500	- 21	1
Waterloo Lutheran	6	15,122	29	34	4	6,524	31	3
Western Ontario	88	293,865	9	12	81	280,394 1,102	_	
Huron	38	2,110 79,662	19	23	31	63,729	19	2:
Windsor York	93	485,255	7	7	79	370,130	9	-
Other post-secondary Ontario	9	30,370	27	31	7	27,420	28	29



Table 2.3 (cont.)

	App	lications	Ra	nk		Awards	Ra	nk
University of Affiliation	Total No. of Projects	Sum of Applications in \$	Col. 1	Col. 2	Total No. of Projects	Sum of Awards in \$	Col. 5	Col. 6
QUEBEC Bishop's Laval McGill Montreal Loyola Marianopolis Sherbrooke Sir George Williams Other post-secondary Quebec	5 69 148 117 11 4 9 30 6	7,978 313,419 586,509 845,766 22,626 10,475 107,917 150,678 9,740	30 15 3 5 - - 27 20 29	39 10 5 2 - 22 18 36	4 54 128 95 11 1 7	6,393 253,459 495,073 606,741 22,626 2,415 97,067 43,369 9,740	31 15 2 4 - 28 23 29	38 10 3 2 - 19 28 33
ATLANTIC Acadia Dalhousie Memorial Moncton Mount Allison New Brunswick Nova Scotia Technical College Prince of Wales St. Francis Xavier Saint Mary's Other post-secondary Atlantic	1 25 23 9 6 40 2 1 6 7 2	2,495 63,504 73,390 49,536 8,696 74,465 4,194 2,400 12,428 6,956 4,700	34 22 23 27 29 18 33 34 29 28 33	45 29 26 30 38 25 44 46 35 40 43	1 21 16. 5 6 35 2 1 4	2,495 49,234 56,390 9,100 8,696 48,558 4,194 2,400 8,154 2,071 1,400	34 22 24 30 29 18 33 34 31 32 34	42 25 23 34 35 26 41 43 36 44 46
OTHER TOTAL	173 2,280	8,861,897	2 <u>34</u>	48	89 1,835	307,047 <u>6,401,205</u>	35	8 <u>48</u>

See notes on next page.



### Table 2.3 (Notes)

Notes: The following institutions are tied in rank:

### Applications (Rank by Total Number)

16th place - 62 projects: Carleton and McMaster 18th place - 40 projects: Guelph and New Brunswick 26th place - 10 projects: Lethbridge and Brock

27th place - 9 projects: Other post-secondary (Ontario), Sherbrooke

and Moncton

29th place - 6 projects: Lakehead, Waterloo Lutheran, Other post-

secondary (Quebec), Mount Allison and

St. Francis Xavier

30th place - 5 projects: Other post-secondary (British Columbia)

and Bishop's

33rd place - 2 projects: Nova Scotia Technical College and Other

post-secondary (Atlantic)

34th place - 1 project: Notre Dame, Acadia and Prince of Wales

### Awards (Rank by Total Number)

15th place - 54 projects: McMaster and Laval 21st place - 26 projects: Victoria and Trent

28th place - 7 projects: Lethbridge, Other post-secondary (Ontario)

and Sherbrooke

29th place - 6 projects: Other post-secondary (Quebec) and Mount

Allison

30th place - 5 projects: Other post-secondary (British Columbia)

and Moncton

31st place - 4 projects: Waterloo Lutheran, Bishop's and St. Francis

Xavier

33rd place - 2 projects: Lakehead and Nova Scotia Technical College 34th place - 1 project: Notre Dame, Brandon, Acadia, Prince of Wales

and Other post-secondary (Atlantic)

St. Paul's College was included with the University of Manitoba; Saint Paul University was included with Ottawa University; the universities of St. Michael's, Trinity and Victoria were included with the University of Toronto; St. Jerome's with Waterloo; Huron with Western Ontario; Loyola and Marianopolis with Montreal.



Table 2.4

Research Grants 1965/66 - 1968/69 by Type of Recipient and Region

Applications and Awards in \$

1968/69	Awards Applica- Awards tions		419,298	333,956 773,922 403,826	,051,731 1,641,901 1,242,060	900,380	63,712 150,932 101,470	83,024 282,560 177,713	2,101,853 4,168,993 2,903,558
1967/68	Applica- tions		205,115	472,752	1,207,790 1	587,134	106,037	206,371	2,785,199
1966/67	Awards		118,236	89,858	460,438	268,463	15,080	30,925	983,000
196	Applica- tions		169,523	195,671	542,015	354,517	29,430	85,058	1,376,214
1965/66	Awards		11,853	38,385	174,978	159,763	12,430	15,385	412,794
196	Applica- tions		13,043	57,394	204,527	213,077	16,365	27,085	531,491
		University Research	British Columbia	Prairies	Ontario	Quebec	Atlantic	Other 1	Total

Number of Applications, Applicants and Awards

26 -

1968/69	Awards	(94) 93 (107) 100 (400) 374 (134) 121 (44) 40 (38) 35 (817) 763
196	Applica- tions	(114) 111 (147) 136 (442) 413 (154) 139 (51) 47 (59) 56 (967) 902
1967/68	Awards	(58) 57 (104) 103 (295) 268 (102) 92 (32) 32 (34) 27 (625) 579
1961	Applica- tions	(69) 65 (130) 124 (320) 291 (128) 110 (37) 37 (51) 44 (735) 671
1966/67	Awards	(42) 40 (47) 45 (166) 159 (80) 72 (13) 13 (23) 21 (37 <u>1</u> ) 35 <u>0</u>
196	Applica- tions	(51) 49 (86) 82 (216) 208 (114) 104 (24) 24 (62) 60 (553) 527
1965/66	Awards	(n.a.) 8 (n.a.) 19 (n.a.) 62 (n.a.) 38 (n.a.) 10 (n.a.) 6
196	Applica- tions	(n.a.) 9 (n.a.) 28 (n.a.) 70 (n.a.) 46 (n.a.) 14 (n.a.) 13
		University Research British Columbia Prairies Ontario Quebec Atlantic Other Total

1 Researchers not affiliated with a Canadian institution of higher education. Notes:

<sup>2</sup> Figures in brackets represent the number of researchers involved



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<u>Table 2.5</u> Research Grants 1965/66 - 1968/69

Percentage Distribution by Type of Recipient and Region

Percentage Distribution of Applications and Awards in \$

1965/66	99/2	1966/67	79/	1967/68	89/	1968/69	69/
	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
	%	%	%	%	%	%	%
	2.9	12.3	12.0	7.3	7.9	10.0	7.6
	9.3	14.2	9.2	17.0	15.9	18.6	13.9
	42.4	39.4	8.97	43.4	50.0	39.4	42.8
	38.7	25.8	27.3	21.1	19.2	21.6	24.3
	3.0	2.1	1.5	3.8	3.0	3.6	3,5
	3.7	6.2	3.2	7.4	4.0	8.9	6.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percentage Distribution of the Number of Applications and Awards

1968/69	Awards	%		12.2	13,1	0.65	15.9	5.2	4.6	100.0
196	Applica- tions	%		12.3	15.1	45.8	15.4	5.2	6.2	100,0
/68	Awards	%		8,6	17.8	46.3	15.9	5.5	4.7	100.0
1967/68	Applica- tions	%		9.7	18,5	43.4	16,4	5.5	6.5	100.0
/67	Awards	%		11,4	12.9	45.4	20.6	3.7	0.9	100.0
1966/67	Applica- tions	%		9,3	15.6	39.5	19,7	4.5	11.4	100.0
99/	Awards	%		5.6	13.3	43.3	26.6	7.0	4.2	100.0
1965/66	Applica- tions	% .		5.0	15.5	38.9	25.6	7.8	7.2	100.0
			University Research	British Columbia	Prairies	Ontario	Quebec	Atlantic	Other*	Total

Researchers not affiliated with a Canadian institution of higher education.



### Table 2.6

### Research Grants 1965/66 - 1968/69

Percentage Increase by Type of Recipient and Region

Increase in the \$ Value of Applications and Awards

	1965/66	1965/66 - 1966/67	1966/67 1967/68	1967/68	1967/68 - 1968/69	1968/69	1965/66 - 1968/69	1968/69
	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
University Research	%	%	%	%	%	%	%	%
British Columbia	1,199.7	897.5	21.0	9.07	104.4	64.2	3,114.7	2,203.3
Prairies	240.9	134.1	141.6	271.6	63.7	20.9	1,248.4	952.0
Ontario	165.0	163.1	122.8	128.4	35.9	18.1	702.8	8.609
Quebec	7.99	68.0	65.6	50.2	53.4	75.0	322.6	341.6
Atlantic	79.8	21.3	260.3	322.5	42.3	59.3	822.3	716.3
Other*	214.0	101.0	142.6	168.5	36.9	114.1	943.2	1,055.1
Total	158.9	138.1	102.4	113.8	49.7	38.1	684.4	603.4

Increase in the Number of Applications and Awards

	1965/66 - 19	1966/67	1966/67 - 1967/68	1967/68	1967/68 - 1968/69	1968/69	1965/66 - 1968/69	1968/69
	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
University Research	%	%	%	%	%	%	%	%
British Columbia	444.4	0.004	32.7	42.5	70.8	63.2	1,133.3	1,062.5
Prairies	192.9	136.8	51.2	128.9	9.7	-2.9	385.7	426.3
Ontario	197.1	156.5	39.9	9.89	41.9	39.6	0.064	503.2
Quebec	126.1	89.5	5.8	27.8	26.4	31.5	202.2	218.4
Atlantic	71.4	30.0	54.2	146.2	27.0	25.0	235.7	300.0
Other*	361.5	250.0	-26.7	28.6	27.3	29.6	330.8	483.3
Total	192.8	144.8	27.3	65.4	34.4	31.8	401.1	433.6

 $<sup>\</sup>star$  Researchers not affiliated with a Canadian institution of higher education.



### 3. SIZE DISTRIBUTION

Figures on the growth of the total programme indicate that not only the number of applications, but also the average amount which was requested, increased between 1965/66 and 1968/69. This may be a significant fact since it suggests that scholars engaged in freely initiated research are carrying out larger projects and that those among them who want to stage complex and costly undertakings are turning in growing numbers to the Canada Council for support. It is interesting to ask whether the tendency toward large projects is limited to a few fields or whether it represents a general phenomenon. gives average project size in dollars by discipline. It shows a general rise, affecting the social sciences as well as the humanities. On the whole, average project size is larger for the social sciences, a fact which is not unexpected in view of the difference in methodology and the greater use of surveying and data processing by social scientists. In 1968/69, the largest average project size occurred in law, followed by linguistics and social psychology. figures in Table 3.1 must be interpreted with care, of course. In the small disciplines, one large project will affect the average very significantly, giving us a misleading impression of the "typical" project. (A case in point is Asian language and literature where we observe an average award of \$10,500 for 1965/66. A check with Table 1.2 reveals that we are in fact dealing with a single project of this amount.) The significance of the overall rise is not in dispute, however. For the total programme, the average application increased by 57 per cent and the average award by 32 per cent.

The average or mean gives us only the central tendency of a statistical distribution; it tells us little or nothing about the distribution's overall



shape. In order to learn more about the variation in project size by discipline, we have grouped all applications and awards made during 1967/68 and 1968/69 into three size classes. We distinguish among projects of up to \$2500, projects between \$2501 and \$5000 and, finally, projects over \$5000. Tables giving this breakdown by discipline can be found in the appendix. The same data, summarized for the social sciences and the humanities, are presented in Tables 3.2 and 3.3. They should be used together with Table 3.4 containing the relevant percentage distributions.

The breakdown of applications and awards into three size groups demonstrates that projects undertaken by social scientists tend to be larger. In both years, more than three-fourths of all projects in the humanities fell below \$2500, while in the social sciences the proportion was close to one-half. When we look at the percentage distribution of dollars, the contrast is accentuated even further. In the humanities, small projects accounted for approximately one-half of total funds; in the social sciences, they accounted for only twenty per cent or less.

The grouping by project size is useful not only for an analysis by discipline or division but also for the presentation of data by university and region.

Consequently, we have extended the breakdown to include tables giving data on applications and awards by university and region. Again, the presentation applies to the two most recent years. Detailed figures can be found in the appendix; the tables in the text give the material in condensed form broken down by type of recipient, region and project size.

Until recently, the three size classes had their counterpart in the administration of grants.



In examining these tables, we would expect a fair degree of similarity in the percentage distribution by region. Since each region encompasses a group of universities with most disciplines being represented, the proportion of applications in each size group should not differ too much from region to region; if it did, one would have to conclude that there were important regional differences in the nature of demand. A look at the percentage distribution for the two years shows indeed that the pattern is similar. The proportion of applications below \$2500 accounts for 55 to 70 per cent of all projects submitted by university researchers in all regions. Only the 1967/68 figure for the Atlantic region falls outside this range. However, a lower figure in 1968/69 suggests that this may have been a temporary phenomenon.



Table 3.1

Research Grants 1965/66 - 1968/69

## Average Project Size in \$ by Discipline

	1965/66	99,	1966/67	19/	1967/68	/68	1968/69	69/
Discipline	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
Anthropology	8	\$	4,896	5,205	8,532	7,181	6,621	6,073
Archaeology	1,500	1,500	3,897	4,197	2,135	2,135	4,110	3,092
Demography	1	ı	4,688	4,688	19,617	3,575	7,656	2,329
Economics	3,064	2,467	3,101	3,140	5,259	4,765	7,801	4,462
Fine Arts		(	1		(			(
Art History	1,428	1,428	1,160	1,400	5,993	3,147	3,966	1,967
Music	4,578	2,678	1,260	1,329	1,729	1,729	0	
Geography	1,117	925	3,431	2,003	4,386	3,893	6,867	5,987
History	1,349	1,469	1,710	1,664	2,970	2,681	2,885	2,492
Industrial Relations	677,4	ı	7,800	7,800	14,000	14,000	1	1
Language & Literature	C C		C		0	L C C C C C C C C C C C C C C C C C C C	070	-
Asian .	1.218	10,500	1,150	1,253	ο . ο	1,806	2,474	,28
English	1,181	1,198	1,380	1,444	,0	1,934	2,384	,27
French	1,136	1,093	1,322	1,389	00	1,734	2,117	,79
German	442	7000	14,415	14,415	5	2,291	I,665	,36
Italian	3,000	1,500	200	200	m (	2,351	2,825	20,0
Slavic (Russian) Spanish	1,283	1,1/5	1,924	2,150	1,931	2,208	2,189	2,198
d			,					,
				And the second control of the second control				



	1965/66	99/	1966/67	79/	1967/68	89,	1968/69	69
Discipline	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
Law	2,875	2,875	2,153	2,361	6,489	6,489	8,776	9,046
Linguistics	4,556	3,723	7,155	8,661	7,294	7,369	7,484	7,344
Mathematics	1,477	1,477	12,825	12,825	25,200	25,200	3,878	4,355
Philosophy	1,455	1,543	1,558	1,759	2,396	2,210	2,352	2,014
Political Science	3,739	3,880	2,276	2,720	5,776	5,577	5,426	4,867
Social Psychology	2,172	2,735	4,662	6,362	6,417	6,042	7,462	7,156
Sociology	000,6	9,430	5,307	5,839	5,483	4,280	7,793	5,733
Other Humanities*	0200	( ) 187	1,372	1,337	5,115	3,776	2,224	1,774
Other Social Sciences*	( 2,270	(7,10/	2,979	6,269	4,515	3,383	6,757	1,978
TOTAL	2,953	2,887	2,611	2,809	4,151	3,630	4,622	3,805

See Table 1.1 for definition of terms.



Table 3.2

Research Grants 1967/68 by Division and Project Size

Applications and Awards in §'

Divicion	Up to \$2500	500	\$2501 to \$5000	\$5000	Over \$5000	25000	IC	Total
110101	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
Humanities $^{\star}$	302,998	277,881	140,467	130,807	282,781	186,705	726,246	595,393
Social Sciences*	316,133	284,013	309,380	243,471	243,471 1,433,440	978,976	2,058,953	1,506,460
Total	619,131	561,894	449,847	374,278	1,716,221	1,165,681	2,785,199	2,101,853
	-	_					_	_

Number of Applications, Applicants, and Awards

Division	Up to \$2500	009	\$2501 to \$5000	\$5000	Over \$5000	2000	Total	al
	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
Humanities *	(209) 209	(195) 195	(39) 38	(36) 35	(29) 25	(19) 17	(277) 272	(250) 247
Social Sciences	(204) 204	(187) 187	(87) 80	79 (29)	(167) 115	(121) 81	(458) 399	(375) 332
Total	(413) 413	(382) 382	(126) 118	(103) 99	(196) 140	(140) 98	(735) 671	(625) 579

Figures in brackets represent the number of researchers involved. Notes:

<sup>\*</sup> See Table 1.3 for definition of terms.



Table 3.3

Research Grants 1968/69 by Division and Project Size

Applications and Awards in \$

	Up to \$2500	\$2500	\$2501 t	\$2501 to \$5000	Over	Over \$5000	Total	al
Division	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
Humanities *	416,716	368,581	172,339	118,745	258,044	179,817	847,099	667,143
Social Sciences*	580,818	462,584	413,402	326,111	2,327,674	1,447,720	3,321,894	2,236,415
Total	997,534	831,165	585,741	444,856	2,585,718	1,627,537	4,168,993	2,903,558

Number of Applications, Applicants, and Awards

Over \$5000 Total	Awards Applica tions	24 (26) 16 (344) 333 (298) 288	154 (154) 111 (623) 569 (519) 475	178     (180)     127     (967)     902     (817)     763
	Applica- tions	(35) 24	(207)	(242)
\$2501 to \$5000	Awards	78 (78)	(88) 88	(122) 122
\$2501 t	Applica- tions	97 (97)	(106) 106	(152) 152
Up to \$2500	Awards	(238) 238	(277) 276	(515) 514
Up to	Applica- tions	(263) 263	(310) 309	(573) 572
	Division	Humanities*	Social Sciences*	Total

Figures in brackets represent the number of researchers involved. Notes:

<sup>\*</sup> See Table 1.3 for definition of terms.



Table 3.4

Research Grants 1967/68 - 1968/69

Percentage Distribution by Division and Project Size

Percentage Distribution of Applications and Awards in \$

		1967/68	1/68			1968/69	69/8	
Project Size	Humanitie	ties*	Social S	Social Sciences*	Humanities	ties*	Social Sciences	ciences*
	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
Up to \$2500	41.7	46.7	15.4	18.9	7-64	55.2	1.7.5	20.7
\$2501 to \$5000	19.4	22.0	15.0	16.2	20.3	17.8	12.4	14.6
Over \$5000	38.9	31.3	9.69	6.49	30.5	27.0	70.1	64.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percentage Distribution of the Number of Applications and Awards

1						
	Social Sciences*	Awards	58.1	18.5	23.4	100.0
69/	Social S	Applica- tions	54.3	18.6	27.1	100.0
1968/69	ties*	Awards	82.6	11.8	5.6	100.0
	Humanities $^{*}$	Applica- tions	79.0	13.8	7.2	100.0
	ciences*	Awards	56.3	19.3	24.4	100.0
1967/68	Social Sciences*	Applica- tions	51.1	20.1	28.8	100.0
1967	ties*	Awards	78.9	14.2	6.9	100.0
	Humaniti	Applica- tions	76.8	14.0	9.2	100.0
	Project Size		Up to \$2500	\$2501 to \$5000	Over \$5000	Total

See Table 1.3 for definition of terms.



Table 3.5

Research Grants 1967/68 by Type of Recipient, Region, and Project Size

Applications and Awards in  $\mbox{$\$$}$ 

	Up to	Up to \$2500	\$2501 t	\$2501 to \$5000	Over	Over \$5000	To	Total
	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards	Applica- tions	Awards
University Research	62 681	890 75	31 075	31 075	111 350	۳۱ ۱۵	705	166 2/8
Prairies	111.450	98,785	102,733	91,008	258,569	144,163	472,752	333,956
Ontario	266,189	249,093	192,009	172,245	749,592	630,393	1,207,790	1,051,731
Quebec	97,063	86,627	59,005	49,585	431,066	266,970	587,134	403,182
Atlantic	42,597	40,297	16,460	13,415	76,980	10,000	106,037	63,712
$0ther^1$	39,151	33,024	48,565	16,950	118,655	33,050	206,371	83,024
Total	619,131	561,894	748,847	374,278	1,716,221	1,165,681	2,785,199	2,101,853

Number of Applications, Applicants and Awards

	S	57 103 268 92 32	27	579
	Awards			
Total	F	(58) (104) (295) (102) (32)	(34)	(625)
To	ica- ns	65 124 291 110 37	777	671
	Applica- tions	(69) (130) (320) (128) (37)	(51)	(735)
	Awards	17 48 19	7	98
\$5000	Awa	(10) (18) (74) (27) (1)	(10)	(140)
Over	lca-	12 26 57 31	10	140
	Applica- tions	(16) (28) (85) (47) (4)	(16)	(196)
	Awards	24 455 133 4	7	66
\$2501 to \$5000	Awa	(9) (24) (46) (15) (4)	(5)	(103)
2501 t	ica- ns	28 50 15	11	118
\$\$-	Applica- tions	(9) (32) (51) (17) (5)	(12)	(126)
	Awards	39 62 175 60 27	19	382
Up to \$2500	Awa	(39) (62) (175) (60) (27)	(19)	(382)
Up to	. a	444 70 184 64 28	23	413
	Applica- tions	(44) (70) (184) (64) (28)	(23)	(413)
		University Research British Columbia Prairies Ontario Quebec Atlantic	Other <sup>1</sup>	Total

1 Researchers not affiliated with a Canadian institution of higher education. Notes:

2 Figures in brackets represent the number of researchers involved.



Research Grants 1968/69 by Type of Recipient, Region, and Project Size

Applications and Awards in \$

Total	Awards	273,014 403,826 1,242,060 705,475 101,470 177,713 2,903,558
Tc	Applica- tions	419,298 773,922 1,641,901 900,380 150,932 282,560 4,168,993
Over \$5000	Awards	77,622 236,123 602,806 536,940 41,174 132,872 1,627,537
Over	Applica- tions	168,904 543,636 895,673 709,775 78,065 189,665
\$2501 to \$5000	Awards	86,569 58,052 219,384 49,765 20,583 10,503
\$2501	Applica- tions	121,858 96,159 237,198 57,373 26,357 46,796
Up to \$2500	Awards	108,823 109,651 419,870 118,770 39,713 34,338
Up to	Applica- tions	128,536 134,127 509,030 133,232 46,510 46,099
		University Research British Columbia Prairies Ontario Quebec Atlantic Other Total

Number of Applications, Applicants and Awards  $^{\rm 2}$ 

38

31	Awards	(94) 93 (107) 100 (400) 374 (134) 121 (44) 40 (38) 35	(817) 763
Total	Applica- tions	(114) 111 (147) 136 (442) 413 (154) 139 (51) 47 (59) 56	(967) 902
\$5000	Awards	(10) 9 (28) 21 (75) 50 (47) 34 (8) 4 (12) 9	(180) 127
Over \$5000	Applica- tíons	(19) 16 (47) 36 (92) 64 (57) 42 (10) 6 (17) 14	(242) 178
0 \$5000	Awards		(122) 122
\$2501 to	Applica- tions	(30) 30 (24) 24 (61) 61 (16) 16 (9) 9 (12) 12	(152) 152
Up to \$2500	Awards	(61) 61 (63) 63 (266) 265 (73) 73 (29) 29 (23) 23	(515) 514
Up to	Applica- tions	(65) 65 (76) 76 (289) 288 (81) 81 (32) 32 (30) 30	(573) 572
		University Research British Columbia Prairies Ontario Quebec Atlantic	Total

Notes: <sup>1</sup> Researchers not affiliated with a Canadian institution of higher education.

<sup>&</sup>lt;sup>2</sup> Figures in brackets represent the number of researchers involved.



Table 3.7

### Research Grants 1967/68 - 1968/69

# Percentage Distribution by Type of Recipient, Region and Project Size

## Percentage Distribution of Applications and Awards in \$

1967/68

ds         Applica- tions         Awards         Awards	
Applica-         Awards tions         Applica-         Awards tions         Applica-         Awards tions         Applica-         Applica-         Awards tions         Applica-           22.0         23.7         16.5         21.5         40.2         63.2         19.0           15.9         16.4         10.1         12.3         15.5         21.1         23.5           62.1         59.9         73.4         66.2         44.3         15.7         57.5           100.0         100.0         100.0         100.0         100.0	British Columbia Prairies
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Applica- Awards Applica- Awards tions
15.9 $16.4$ $10.1$ $12.3$ $15.5$ $21.1$ $23.5$ 62.1 $59.9$ $73.4$ $66.2$ $44.3$ $15.7$ $57.5$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$	30.6 32.5 23.6 29.6
62.1     59.9     73.4     66.2     44.3     15.7     57.5       100.0     100.0     100.0     100.0     100.0	15.1 18.7 21.7 27.2
100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	54.3 48.8 54.7 43.2
	100.0 100.0 100.0 100.0

1968/69

ch Quebec Atlantic		a- Awards		I9.3	5.9	74.8	100.0
		Applica- tions	1	16.3	16.6	67.1	100.0
	ntic	Awards		39.1	20.3	9.04	100.0
	Atla	Applica- tions	(	30°8	17.5	51.7	100.0
	bec	Awards	,	16.8	7.1	76.1	100.0
h	Que	Applica- tions	-	14.8	4.9	78.8	100,0
University Research	rio	Awards	(	33.8	17.7	48.5	100.0
	Ontario	Applica- tions	1	31.0	14.4	54.6	100.0
	Prairies	Awards		27.1	14.4	58.5	100.0
		Applica- tions		17.3	12.4	70.3	100.0
	Columbia	Awards	(	39.9	31.7	28.4	100.0
	British Columbia	Applica- tions		30.7	29.0	40.3	100.0
Project Size				Up to \$2500	\$2501 to \$5000	Over \$5000	Total



Percentage Distribution of the Number of Applications and Awards

1967/68

		rds	70.4	∞.	14.8		40 -
	Otner	Awards	70	14.8	14	100.0	
	0	Applica- tions	52.3	25.0	22.7	100.0	
	Atlantic	Awards	84.4	12.5	3.1	100.0	
	Atla	Applica- tions	75.7	13.5	10.8	100.0	
	Quebec	Awards	65.2	14.1	20.7	100.0	
h.	Que	Applica- tions	58.2	13.6	28.2	100,0	
y Researd	rio	Awards	65.3	16.8	17.9	100.0	
University Research	Ontario	Applica- tions	63.2	17.2	19.6	100.0	
	ies	Awards	60.2	23.3	16.5	100.0	-
	Prairies	Applica- tions	56.4	22.6	21.0	100.0	
	olumbia	Awards	4.89	15.8	15.8	100.0	
	British Columbia	Applica- tions	67.7	13.8	18.5	100.0	
	Project Size			\$2501 to \$5000	Over \$5000	Total	

### 1968/69

	Other		Awards	65.7	9.8	25.7	100.0	
			Applica- tions	53.6	21.4	25.0	100.0	
		ic	Awards	72.5	17.5	10.0	100.0	
	1 + A	מרזשו	Applica- tions	68.1	19.1	12.8	100.0	
		ע	Awards	60.3	11.6	28.1	100.0	
	Oadario	ממבה	Applica- tions	58.3	11.5	30.2	100.0	
Research		Ontario	Awards	70.8	15.8	13.4	100.0	
University Research	, , ,		Applica-   Awards	69.7	14.8	15.5	100.0	
		Prairies	Awards	63.0	16.0	21.0	100.0	
	\$ 0 \$ A		Applica- Awards	55.9	17.6	26.5	100.0	
		olumbia	Awards	65.6	24.7	7.6	100.0	
	British Columbia	DITCISII	Applica- Awards tions	58.6	27.0	14.4	100.0	
	Project Size			Up to \$2500	\$2501 to \$5000	Over \$5000	Total	



### 4. RATES OF SUCCESS

Under the programme of research grants, individual scholars, or groups of scholars, take the initiative by submitting research proposals and by requesting research funds. Not all applications are successful; they are judged according to merit by expert assessors chosen by the Council which makes a final decision based on these outside opinions. While a majority of projects are accepted or rejected in toto, the Council may also decide to grant only part of a request or to modify the proposed research budget.

The relation of applications to awards provides one of the most interesting indicators for a programme of grants. We can distinguish between three different rates measuring success in the programme. The most common indicator is based on dollar figures and may be termed the "dollar rate". It is computed by expressing the amount of dollars awarded as a percentage of the amount of In addition, we may define a "project rate", giving the number of successful projects as a percentage of all projects submitted, and an "applicant rate", showing the number of successful applicants as a percentage of all scholars involved in making applications. The applicant rate may differ from the project rate since more than one scholar may take part in any one research project. It is perhaps the best indicator of participation being related directly to the number of people who make contact with the programme. However, all three rates have their usefulness, each throwing light on a somewhat different aspect of the programme's operations. In the tables which follow, we present material on all three rates whenever possible.



Success rates can be calculated for the programme as a whole as well as for programme components. The determination of separate rates for various subcategories enables the analyst to check on variations within the programme, giving useful clues about internal consistency. While subdivision can thus yield interesting results, one must exercise care when dealing with small groupings. Success rates for particular disciplines, for example, are difficult to interpret on an annual basis. It is preferable to begin the analysis by looking at rates for overall groupings in the humanities and the social sciences.

Before we turn to the presentation of actual rates, a few remarks on their meaning and interpretation may be in order. If success rates diverge among programme components, the analyst may offer three reasons as an explanation. First, it is possible that submissions in one group of disciplines are of higher quality than in another group. Greater merit would then result in higher rates Second, it is conceivable that assessors from various disciplines of success. apply different standards. Anyone following theoretical discussions in scholarly journals will at times get the impression that there is an excessive influenced by such attitudes when commenting on projects, proposals may be judged more severely in some disciplines than in others. Finally, different rates, in particular different dollar rates, may reflect a deliberate policy on the part of the granting agency. Granting agencies may in fact require higher standards in certain disciplines, and there is no doubt that some American foundations have adopted such a policy at times in order to encourage the development of research in particular fields. It is important to realize



in the context of this report that the Canada Council has <u>not</u> engaged in any deliberate policy designed to influence the direction of research. Applications are judged strictly according to merit and each application is considered and assessed separately. In fact the programme has no provision for a formal comparison or ranking of projects.

Table 4.1 gives success rates for the programme as a whole and by division. Overall rates have undergone an interesting cyclical movement. Starting at 77.7 in 1965/66, the dollar success rate dropped to 71.4 in the following year, only to rise back to 75.5 in 1967/68. A final drop to 69.6 occurred in the last year. If we compare the level of annual rates in the two divisions, we find rates in the social sciences to be somewhat lower than in the humanities. Both divisions experienced the same cyclical movement as the total programme.

Until recently procedures for approving large projects have differed from those in use for small ones. <sup>1</sup> This raises the question of whether success rates are affected by procedure. It is also possible that assessors do apply more severe standards to large projects than to small ones, being more willing to give applicants the benefit of the doubt when only small sums of money are involved. In Tables 4.2 and 4.3, we show success rates calculated by project size. The classification is the same as in the preceding section; we again distinguish between projects below \$2500, projects falling between \$2501 to \$5000 and, finally, projects exceeding \$5000. The tables cover data for 1967/68 and 1968/69 and rates are given by division.

Authority for approval of grants below \$2500 was delegated to officers. Medium size grants were submitted to the Council for approval by means of a brief listing. For grants above \$5000, the Council was presented with a detailed description of each project. In July 1968, the break-off points were revised to \$5000 and \$10,000.



The two tables reveal some interesting variations in rates among size groups. They provide clear evidence that small projects have higher rates than large ones. Starting with figures for 1967/68 and applying to the programme as a whole, we notice a decline in the dollar rate from 90.8 for so-called officers' grants to 83.2 for projects of medium size and 67.9 for projects over \$5000. The same trend can be observed in 1968/69 with figures of 83.3, 75.9 and 62.9 per cent and it is repeated furthermore within each division.

The breakdown by project size also throws light on the relation between different types of success rates. Generally, we may expect the dollar rate to be the lowest one. It will be exceeded by the project rate since there is a tendency to judge larger projects more severely and since some projects, while being accepted, are cut down in size. The applicant rate, on the other hand, stays close to the project rate for small grants (in Tables 4.2 and 4.3 the two are identical in this category). The rates diverge only for undertakings of medium and large size, a result which is hardly surprising since large research efforts are more likely to involve team work than small projects.

It has been suggested that differences in the attitudes of assessors may affect success rates. This possibility can be investigated further by calculating separate rates for each discipline. In Table 4.4 we have summed applications and awards for the total period and, by relating the two, arrived at separate rates. Concentrating on the large disciplines defined here somewhat arbitrarily as those including at least forty applications, we can point to what appear to be revealing rate differentials. Among the nine social sciences falling into the large category, five have project rates



above 80 per cent and one - law - shows a rate of 90.7 per cent. The three remaining disciplines, on the other hand, have a measurably lower incidence of success. The relevant project rates are 72.5 for sociology, 74.7 for geography and 75.7 for social psychology. Two among them, sociology and geography, also have low dollar success rates. It should be noted, though, that economics, a discipline with a high project rate, has the lowest dollar rate of all.

Does the table provide evidence for differential treatment in the social sciences? It is not really possible to draw a conclusion from the data. The table gives no information on the size distribution of projects. Since project size seems to affect success, disciplines with a large proportion of small projects may well have a higher overall success rate than disciplines where the number of projects below \$2500 is small. Only if we can find measurable differentials within the same size group would there seem to be evidence for unequal treatment. As a check, we did calculate separate success rates for small projects in the affected disciplines. The result showed them to be uniformly high which should eliminate suspicions about inequities in the assessment process.

Among the large disciplines in the humanities, only art history stands out with a low project rate (67.2). Again, the success rate for small projects is high, however (90.7). Finally, the category "other", which combines projects in disciplines not listed separately and interdisciplinary ventures has a rate of success below the general level, but small projects seem to fare reasonably well even in this composite group (the project rate for small awards is 90.5 per cent).



The analysis of success rates can be extended to the regional breakdown of grants. The discussion which follows is based on material presented in sections two and three. As before, we make a distinction between requests and awards originating from and going to scholars in Canadian universities and a category "other" which includes all scholars not so affiliated. University research is then further broken down by region.

Rates of success calculated on this basis for each of the four years can be found in Table 4.5. In interpreting the table, we should note that the categories are rather heterogeneous in nature. Some (Atlantic region, "other"), are quite small while others (Ontario) are large, involving large amounts of money and a great number of projects. It is no wonder therefore that rates of success show a fair degree of variation. Two general conclusions emerge from the table. First, it seems quite clear that scholars not affiliated with Canadian universities have a markedly lower rate of success as a group than scholars who have such an affiliation. Except for 1968/69, the difference is large and even in the last year it persists for the project and applicant rates. Second, the table throws some further light on the conclusion with regard to Quebec reached in the second section. It is evident that the decline in Quebec's overall share in the programme does not derive from a decline in success rates. Other factors, relating to the demand for funds, must provide an explanation for this phenomenon.

To press the analysis further, we have broken down the data for 1967/68 and 1968/69 by grant size. Tables 4.6 and 4.7 contain rates of success by project size. A number of interesting points emerge. We may note, for example, that applicants not affiliated to a Canadian university have lower



rates of success in all project size groups. (There is one exception to this rule: large projects in 1968/69.) Ontario has the highest project and applicant success rates in both years as well as the highest dollar rate in 1967/68. In the same year, the Atlantic region showed an abnormally small dollar success rate for projects over \$5000. However, the corresponding figure for 1968/69 was again higher although it still fell below the average.



Table 4.1

Research Grants 1965/66 - 1968/69

Rates of Success by Division

	Applicant Rate of Success	%	9.98	83,3	84.5	
1968/69	Project Rate seess to	%	86.5	83.5	84.6	
	\$ Rate of Success	%	78.8	67.3	9.69	
	Applicant Rate seess	%	90.3	81.9	85.0	
1967/68	Project Rate of Success	%	8.06	83.2	86.3	
	jo eja Success	%	82.0	73.2	75.5	
	Applicant Rate to Success	%	66.2	67.7	67.1	
1966/67	Project Rate of Success	%	65.6	0.79	7.99	
	\$ Rate	%	72.6	71.1	71.4	
	Applicant Rate seess	6%	n,a,	n.a.	n.a.	
1965/66	Project Rate of Success	%	82.4	77.7	79.4	
1	\$ Rate seess To	%	80.2	77.1	77.7	
	Division		Humanities*	Social Sciences	Total	

See Table 1.3 for definition of terms,

\*



Table 4.2

# Research Grants 1967/68

Rates of Success by Division and Project Size

Total	Applicant Rate	%		.2 81.9	3 85.0
Ĕ	Project Rate of Success	%		83	86.3
	\$ Rate of Success	%	82.0	73.2	75.5
000	Applicant Rate of Success	%	65.5	72.5	71.4
Over \$5000	Project Rate of Success	%	0.89	70.4	70.0
6	\$ Rate of Success	%	0.99	68.3	67.9
\$5600	Applicant Rate of Success	%	92.3	77.0	81.7
\$2501 to	Project Rate of Success	%	92.1	80.0	83.9
\$25	\$ Rate of Success	%	93.1	78.7	83.2
00	Applicant Rate of Success	%	93.3	91.7	92.5
to \$2500	Project Rate of Success	%	93.3	91.7	92.5
ďΩ	\$ Rate sessucess	%	91.7	89.8	90.8
	Division		Humanities *	Social Sciences*	Total

See Table 1.3 for definition of terms.

\*



Table 4.3

Research Grants 1968/69

Rates of Success by Division and Project Size

	Applicant Rate	%	9.98	83.3	84.5	
Total	Project Rate of Success	%	86.5	83.5	84.6	
	\$ Rate	%	78.8	67.3	9.69	
	Applicant Rate	%	74.3	74.4	74.4	
Over \$5000	Project Rate of Success	%	9.99	72.1	71.3	
9A0	\$ Rate of Success	%	2.69	62.2	62.9	
000	Applicant Rate	%	73.9	83.0	80.3	
1 to \$5000	Project Rate of Success	%	73.9	83.0	80.3	
\$2501	\$ Rate of Success	%	68.9	78.9	75.9	
500	Applicant Rate of Success	%	90.5	7°68	89.9	-
Up to \$25	Project Rate	%	90.5	89.3	89.9	
ďΩ	\$ Rate of Success	%	88.4	79.6	83.3	
	Division		Humanities	Social Sciences*	Total	

 $^{\star}$  See Table 1.3 for definition of terms.



# Table 4.4

# Research Grants 1965/66 - 1968/69

# Rates of Success for Total Period by Discipline

	Appl	ications	Awa	ırds	Rates o	f Success
Discipline	Total No. of Projects	Sum of Applications in \$	Total No. of Projects	Sum of Awards in \$	Project Rate	\$ Rate
A		400.006	5.0	000 010	%	%
Anthropology	63	428,926	53	328,942	84.1	76.7
Archaeology	32	114,499	29	90,531	90.6	79.1
Demography	12	100,820	9	28,170	75.0	27.9
Economics	164	909,892	137	538,236	83.5	59.2
Fine Arts Architecture Art History Music	28 64 29	107,135 172,576 97,856	15 43 25	32,680 130,923 80,480	53.6 67.2 86.2	30.5 75.9 82.2
Geography	91	451,338	68	283,220	74.7	62.8
History	384	978,810	316	739,046	82.3	75.5
Industrial Relations	4	34,049	3	29,600	75.0	86.9
Language & Literature Asian Classics English French German Italian Slavic (Russian) Spanish	17 47 297 147 40 19 29 39	77,376 89,868 585,351 256,785 87,547 25,702 59,863 81,468	13 40 253 124 35 19 24 35	70,004 76,033 485,961 205,575 76,150 24,202 46,967 70,796	76.5 85.1 85.2 84.4 87.5 100.0 82.8 89.7	90.5 84.6 83.0 80.1 87.0 94.2 78.5 86.9
Law	43	293,942	39	285,307	90.7	97.1
Linguistics	64	455,645	54	385,671	84.4	84.6
Mathematics	8	86,758	7	83,358	87.5	96.1
Philosophy	94	196,810	78	156,405	83.0	79.5
Political Science	156	757,662	127	597,392	81.4	78.8
Social Psychology	111	676,614	84	533,672	75.7	78.9
Sociology	218	1,446,245	158	889,894	72.5	61.5
Other Humanities Other Social Sciences	( 80	( 288,360	( ( 47	( 131,990	( 58.8	( 45.8
TOTAL	2,280	8,861,897	1,835	6,401,205	80.5	72.2



Table 4.5

Research Grants 1965/66 - 1968/69

Rates of Success by Type of Recipient and Region

6	Applicant Rate of Success	%	82.5 72.8 90.5 87.0 86.3 84.5
1968/69	Project Rate of Success	%	83.8 73.5 90.6 87.1 85.1 62.5
	\$ Rate of Success	%	65.1 52.2 75.6 78.4 67.2 62.9
00	Applicant Rate of Success	%	84.1. 80.0 92.2 79.7 86.5
1967/68	Project Rate of Success	%	87.7 83.1 92.1 83.6 86.5 61.4
	\$ Rate of Success	%	81.1 70.6 87.1 68.7 60.1
7	Applicant Rate of Success	%	82.4 54.7 76.9 70.2 54.2 37.1
1966/67	Project Rate of Success	%	81.6 54.9 76.4 69.2 54.2 35.0
	\$ Rate of Success	%	69.7 45.9 84.9 75.7 51.2 36.4
9	Applicant Rate of Success	%	n n n a .
1965/66	Project Rate of Success	%	88.9 67.9 88.6 82.6 71.4 79.4
	\$ Rate of Success	%	90.9 66.9 85.6 75.0 56.8
			University Research British Columbia Prairies Ontario Quebec Atlantic Other1
			University British Prairies Ontario Quebec Atlantic Otherl

Note: 1 Researchers not affiliated with a Canadian institution of higher education.



Table 4.6

Research Grants 1967/68

Rates of Success by Type of Recipient, Region and Project Size

Up to \$2500 \$2501 to \$5000 Over \$5000 Total	\$ Kate of Success of S	86.3       88.6       88.6       100.0       100.0       100.0       72.8       75.0       62.5       81.1       87.7       84.1         88.6       88.6       88.6       88.7       75.0       55.8       65.4       64.3       70.6       83.1       80.0         93.6       95.1       95.1       89.7       90.0       90.2       84.1       84.2       87.1       92.1       92.1         89.2       93.8       84.0       86.7       88.2       61.9       61.3       57.4       68.7       83.6       79.7         94.6       96.4       96.4       81.5       80.0       80.0       21.3       25.0       25.0       60.1       86.5       86.5	84.4 82.6 82.6 34.9 36.4 41.7 27.9 40.0 62.5 40.2 61.4 66.7	90.8 92.5 92.5 83.2 83.9 81.7 67.9 70.0 71.4 75.5 86.3 85.0
		University Research British Columbia Prairies Ontario Quebec Atlantic	Other	Total

Researchers not affiliated with a Canadian institution of higher education. Note:



Table 4.7

Research Grants 1968/69

Rates of Success by Type of Recipient, Region, and Project Size

	ďŊ	to \$2500	00	\$2501	to	\$5000	Above	ve \$5000	00		Total	
	\$ Rate of Success	Project Rate to Success	Applicant Rate to Success	\$ Rate of Success	Project Rate of Success	Applicant Rate to Success	\$ Rate of Success	Project Rate of Success	Applicant Rate of Success	\$ Rate of Success	Project Rate of Success	Applicant Rate
	%	%	%	%	%	%	%	%	%	%	%	%
University Research British Columbia Prairies Ontario Quebec Atlantic	84.7 81.8 82.5 89.1 85.4	93.8 82.9 92.0 90.1	93.8 82.9 92.0 90.1	71.0 60.4 92.5 86.7 78.1	76.7 66.7 96.7 87.5	76.7 66.7 96.7 87.5	46.0 43.4 67.3 75.6 52.7	56.3 58.3 78.1 81.0 66.7	52.6 59.6 81.5 82.5 80.0	65.1 52.2 75.6 78.4 67.2	83.8 73.5 90.6 87.1 85.1	82.5 72.8 90.5 87.0 86.3
Other <sup>1</sup>	74.5	76.7	76.7	22.4	25.0	25.0	70.1	64.3	9.07	62.9	62.5	7.79
Total	83.3	89.9	89.9	75.9	80.3	80.3	62.9	71.3	74.4	69.6	84.6	84.5

Researchers not affiliated with a Canadian institution of higher education. Note:



### 5. PARTICIPATION

Figures on applications and awards can serve to throw light on the growth and operation of the Council's programme. To evaluate the programme's <a href="impact">impact</a>, on the other hand, we must relate these figures to the community of scholars to be served. The pattern of applications and awards must be tied to the size and characteristics of the research community from which requests for assistance originate.

Research grants are available to all career scholars, whether they are affiliated with an institution of higher education or not. We have shown that most of the demand for the programme arises from scholars who are associated with a university or college and that, for the most part, the research community can be identified with the academic teaching force. Statistics on the size and characteristics of university staff are available and can serve as the basis for estimating the "universe" or population of potential researchers - at least the academic segment of this population. Unfortunately, we have no statistics to estimate the much smaller segment of unaffiliated scholars. The lack of such figures has forced us to confine the analysis of participation to academic scholars. Unaffiliated applicants will be excluded from all tables in this section of the report.

When we consider the programme in relation to the research community, a whole group of questions arise. What is the level of participation? How does the response of scholars differ among disciplines? What are the factors which can serve to explain variations in participation rates? We shall try to suggest answers to these questions on the basis of data assembled in



Table 5.1 where the number of applicants is related to the number of faculty members for all the major disciplines. Figures on university staff given in the table refer to 1967/68 and include all teaching staff in AUCC member institutions. They are related to the number of applicants who submitted projects to the Council in the same year. There is a certain danger in the use of one year only and it would have been preferable to calculate a whole series of participation rates. Unfortunately, data limitations force us to confine the analysis to figures for 1967/68.

Since the data on the research community derive from material collected and coded by DBS, the disciplines shown in Table 5.1 have been defined according to DBS usage. Adherence to the Bureau's terminology also explains the use of the adjective "pure" to describe groups of disciplines in the humanities and the social sciences. The term does not refer to the nature of research in these disciplines. Scholars in a "pure" social science such as economics carry out theoretical as well as applied work, and the Canada Council supports both. The use of the term should be looked upon merely as a convenience which allows the reader to relate our discussion more easily to the available statistics.

The fact that the data in Table 5.1 are derived from two separate sources made necessary some adjustments of the figures. Most of these are explained in detail at the back of the table, but it should perhaps be pointed out that

It should be pointed out that applicants were classified according to project topic rather than departmental affiliation. Since the correspondence between the two criteria is very close, however, matching of the series is justified.

The figures on the number of university teachers are derived from special tabulations based on DBS data. Since such data were not available for 1966/67 and 1968/69, it was not possible to prepare participation rates for these years. Data on teachers did exist for 1965/66, but information on the number of applicants (as distinguished from the number of projects) was unfortunately lacking for the first year considered in this report.



applicants in architecture, mathematics and archaeology have been excluded altogether since data on the number of teachers in these fields were not available. Applicants in linguistics, so far counted as social scientists, have been grouped together with applicants from the "pure" humanities.

In 1967/68 the Canada Council programme did not reach a large proportion of the research community. Looking at the participation rate in column three we notice that only 8.1 per cent of university teachers in the humanities and social sciences applied for research support. Since a number of projects were rejected, the proportion of university teachers receiving assistance was even smaller. The level of participation in the social sciences was two per cent above the level in the humanities. It was highest in the "pure" social sciences where the rate reached 13.7. Even this rate is low in absolute terms, however, if we compare it to rates reached in the support programmes of other Councils. Figures obtained from the National Research Council indicate, for example, that NRC reached approximately 60 per cent of all scholars in the natural and physical sciences with its grants in aid to research.

Turning to participation rates for particular disciplines, we find a number of differences which call for comment. In the humanities, teachers of modern language and literature had the highest participation. Teachers of classics, fine arts and philosophy, on the other hand, made few applications in relation to their total number. Most humanists who submited projects would be classified with the "pure" disciplines in the DBS scheme. However, we also have the "applied" disciplines which in this instance include journalism, library science and theology. In 1967/68, the Council received only one project from university sources in these disciplines. The low rate of participation probably reflected the nature of study in these areas which have less of a research orientation than the "pure" fields.



The "pure" social sciences were the group with the highest rates. There were two exceptions among them - psychology and economics. The low rate in psychology is easily explained. It is a discipline in which the Canada Council, sharing responsibility with NRC, confines its support to the area of social psychology. The case of economics raises more difficult questions. Are social scientists in some fields drawn into contract research, away from freely initiated work, because the Canada Council's programme does not offer stipends? Is economics a case in point where this phenomenon assumes a significant proportion?

Questions about contract research are difficult to answer since so little information on the subject is available. We shall make an attempt to throw light on the distribution of such research commissioned by the federal government. Before turning to this subject, we must devote some attention to the "applied" social sciences, however. Table 5.1 provides data on staff and applications in business administration, education and law in 1967/68. Except for law, we had an extremely low level of participation in these disciplines. While it is true that the number of applications in business administration and education may be understated because some relevant projects were counted as economics or psychology, we can hardly explain the phenomenon in this way. If the American experience provides any guidance, business administration and education are disciplines with great research potential and it would be unfortunate if Canadian scholars in these fields did not develop a strong research orientation. It is possible, of course, that greater familiarity with the Council's programme will improve their participation in the future.<sup>2</sup>

One should perhaps draw attention to the rather unusual time pattern of applications in economics. While the number of applications increased very slowly during the first three years, thus being low in 1967/68, it rose steeply in 1968/69. It is possible, therefore, that economists have begun to catch up with their colleagues in the very recent past. See Table 1.2, p. 10.

The "applied social sciences were better represented in the doctoral fellowship programme where we had, for example, 26 awards in business administration in 1967/68 and 30 in the following year.



A wide variety of private and governmental organizations commission research on topics which are of interest to them. Much of this work is carried out by university teachers who have a choice of engaging in contract research carrying a financial reward or in freely initiated research of the type supported by the Canada Council. The opportunities of engaging in contract research differ among fields and disciplines. In general, there is relatively little opportunity for the humanists and even in the social sciences, work is concentrated in a few disciplines. For this reason, one would expect an uneven impact on participation in the Canada Council programme.

In any society, research talent is a scarce resource and the allocation of such talent among different activities is a topic of importance. Unfortunately, we know very little about expenditures on commissioned research and the distribution of such outlays among economic sectors and different agencies. Two studies which have recently appeared throw some light on work commissioned by the mission-oriented federal agencies. Even they give little information on the distribution of expenditures among fields and disciplines, however. Since such a breakdown is crucial for our discussion, we have attempted to rework the material appearing in these studies. With the cooperation of the authors, who made their files available, it was possible to draw up Table 5.2 showing research contracts in the social sciences and the humanities awarded in 1966/67 and 1967/68 by the mission-oriented agencies of the federal government.

We realize, of course, that Table 5.2 only gives part of the picture.

Although confined to the activities of the federal government, it still

J.B. MacDonald et. al., The Role of the Federal Government in Support of Research in Canadian Universities, Special Study No. 7, Science Council of Canada, Ottawa 1969 and Education Support Branch, Department of the Secretary of State, "Federal Expenditures on Research in the Academic Community 1966-67, 1967-68", Ottawa 1968.



omits an important portion of these activities. While no detailed information on royal commissions is available, it is estimated that they made overall expenditures of \$2.7 million in 1966/67 and \$3.3 million in 1967/68, almost all of which was spent on research in the social sciences. In addition, information on federally sponsored contract research should be complemented by data on work commissioned by other levels of government and the private sector.

While Table 5.2 gives a partial picture, it nevertheless presents valuable information. To our knowledge, such data are available from no other source. We also think that the percentage breakdown by discipline is broadly representative of all research commissioned by government. Regarding the private sector, we would expect a substantial demand for the services of faculty members in business administration. Apparently the federal agencies feel little need for such services, although it should be kept in mind that some work in business may have been classified as economics.

Table 5.2 shows that opportunities for doing contract research do indeed vary among disciplines. The humanities appear only in a marginal way. Most social sciences are represented, but research expenditures are concentrated in a few. Economics stands out as by far the most important one. In both years, economists did more than twice as much work as their colleagues in the discipline which comes second - sociology. With 40 per cent in 1966/67 and 47 per cent in 1967/68, work in economics seems to account for slightly less than half of all expenditures on commissioned research. We stress this fact for an obvious reason: it would seem to explain the low participation rate of economists discovered in Table 5.1 It does appear that economics is a field in which the great opportunity for work carrying a financial reward draws researchers away from freely initiated projects.

<sup>1</sup> J.B. MacDonald et. al., op. cit., p. 77.



Questions about the participation of researchers in various disciplines can be supplemented by questions on the <u>regional</u> variation in response. We have devoted much space to the discussion of applications and awards from Canada's major regions. It remains now to relate the number of applicants to the size of the scholarly community in each of them.

In Table 5.3, we present participation rates by region. They are based on the same data sources as the rates applying to different fields of study, referring again to 1967/68. The Table shows that response to the programme did differ from region to region. The Atlantic provinces, in particular, had a participation rate falling considerably below the national average. Ontario, on the other hand, had a level of participation exceeding the average by nearly two percentage points. The West and Quebec stood in the middle, close to the overall rate of 8.1 per cent. We noted earlier that Quebec's share of total applications declined markedly during the four-year interval which was analysed. It is significant, therefore, that toward the end of the period the province's participation rate was still near the national average. In fact, Table 5.3 reveals a picture which closely parallels the pattern of academic development and teacher qualifications in different parts of the country. It was shown in a separate report dealing with university teaching staff that the Atlantic provinces have a much lower proportion of social scientists and humanists with doctoral degrees than Canada as a whole. Ontario, the region with the largest teaching force, on the other hand, has the best qualified one. Quebec and the Western provinces again fall somewhere in between, being close to the national average. It would seem therefore, that Table 5.3 is in most part a reflection of overall academic development in Canada.

Op. cit., p. 17.



Table 5.1

Programme of Research Grants

Participation Rates in 1967/68 by Division and for Selected Disciplines

Division and Discipline	Number of University Teachers 1967/68	Number of Applicants 1967/68	Participation Rate (Col. 2 as % of Col. 1)
Humanities			
Fine Arts Classical Language & Literature Modern Language & Literature English French German & Spanish Philosophy All "Pure" Humanities All Humanities	257 250 2,314 1,093 561 201 660 3,525 3,732	15 9 191 93 43 24 35 257	5.8 3.6 8.3 8.5 7.7 11.9 5.3 7.3
Social Sciences  Anthropology Economics Political Science Geography History Psychology Sociology	96 522 343 302 594 603 274	17 40 62 38 103 38 79	17.7 7.7 18.1 12.6 17.3 6.3 28.8
All "Pure" Social Sciences  Business Administration Education Law  All Social Sciences  Total	2,844 469 791 262 4,511 8,243	391 7 2 12 412 670	13.7 1.5 0.0 4.6 9.1 8.1

Notes: 1. The number of university teachers is derived from "Growth and Characteristics of University Teaching Staff in the Social Sciences and the Humanities 1956-57 to 1967-68," a Report by the Canada Council, prepared by Dr. Walter P. Hettich. May 1969. The figures are taken from Table 1 and cover all university teachers in AUCC member institutions. Some adjustment was necessary, however, for the purpose of the present report.

The terms Humanities and Social Sciences are defined according to DBS usage with the following exceptions:

- We have not included Fine Applied Arts in All Humanities, nor have we counted Health Education as part of All Social Sciences as done by DBS.

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# Table 5.1 (Notes)

# Notes: 1. (cont.)

- Staff in joint departments of economics and political science has been allocated between the two disciplines according to the ratio of staff members in separate departments.
- 2. The number of applicants includes only those applicants for Canada Council grants who were affiliated with a Canadian institution of higher education. In addition, the following adjustments were necessary to make figures on applicants conform to DBS usage:
  - Fine Arts excludes applicants in Architecture.
  - Linguistics is included in Modern Languages and Literature.
  - Library Science and Journalism, otherwise included in Other Social Sciences, are part of All Humanities.
  - Business Administration includes Industrial Relations, while Geography and Demography have been combined.
  - Mathematics and Archaeology have been excluded altogether.



Table 5.2

Research Contracts in the Social Sciences and the Humanities

Awarded by Agencies of the Federal Government in

1966/67 and 1967/68

		1966/67			1967/68	-
Discipline	No. of Projects	Contracts in \$'000	% Distr. of \$ Amount	No. of Projects	Contracts in \$'000	% Distr. of \$ Amount
Anthropology	18	106	10.8	11	100	5.9
Archaeology	10	88	9.0	10	49	2.9
Demography	-	-	_	1	3	0.2
Economics	49*	386	39.8	63*	804	47.0
Fine Arts Architecture	11	93	9.5	4	7	0.4
Geography	5	101	10.3	8	99	5.9
History	9	30	3	15	29	1.7
Law	5	24	2.4	4	207	12.2
Linguistics	1	1	1.0	-	-	-
Mathematics	-	-	-	1	3	0.2
Social Psychology	-	13	1.3	1*	23	1.4
Sociology	8*	110	11.2	14*	368	21.7
Education	1	17	1.7	1	8	0.5
Totals	117*	<u>969</u>	100.0	<u>133</u> *	1,700	100.0

<sup>\*</sup> Approximate figures. For explanatory notes, see next page.



## Table 5.2 (explanatory notes)

This table was prepared by Mary Sullivan of the Canada Council staff who would like to thank Dr. J.B. Marshall of NRC and Mr. Z. Kay, Education Support Branch, Department of Secretary of State, for their cooperation.

The table is based on information collected for J.B. MacDonald et. al., op. cit. While it covers the same group of agencies as the original tables in the MacDonald Survey (Tables 4.7 and 4.8, pp. 81 - 91), it incorporates some adjustments:

- The total figure for the social sciences and humanities must be considered as an estimate; only those projects which could be clearly classified in these areas and which were carried out by university scholars have been included here.
- In some instances, projects fell within the social sciences and humanities but were carried out by M.A. candidates. These were not considered in this report.
- Some agencies did not provide details of the research contracts they awarded and one had to make some assumption regarding the subject of investigation. For example, in compiling Table 5.2, all the contracts reported by D.B.S. were considered to be in the field of Economics.



Table 5.3

Programme of Research Grants

Participation Rates in 1967/68 by Region

Region	Number of University Teachers 1967/68	Number of Applicants 1967/68	Participation Rate (Col. 2 as % of Col. 1)
West	2,552	195	7.6
Ontario	3,197	316	9.9
Quebec	1,660	124	7.5
Atlantic	834	33	4.0
Total	8,243	668	8.1

See Table 5.1 for explanatory notes.



#### SUMMARY AND CONCLUSION

The operation of a programme of grants involves two related phases.

The process begins when an applicant submits a proposal for support. While the agency, in this case the Canada Council, establishes the framework within which it will consider requests, thus setting the boundaries of demand, it cannot determine the response to the programme within these boundaries. The pattern of applications reflects the needs and characteristics of the community for which the programme has been designed and, indirectly at least, the forces which have shaped the community itself.

Once the application has been received, Council policy becomes the determining factor. The proposal is judged according to the system established for evaluation and then accepted or rejected by administrative action. The pattern of awards may be looked upon as the Council's response to the pattern of demand. In the case of the grants programme, it represents the collective response of outside assessors, Council officers, members of the academic panels, and members of the Council proper.

In representing exhaustive statistical material on both requests and awards, the present report has attempted to shed light on both phases. Each pattern, in turn, was analysed according to two major characteristics: distribution by discipline and distribution in space. As a result, it was possible to draw conclusions regarding differences in the participation of various groups of scholars and to answer some questions about the operation of the system of evaluation.



Making a broad distinction between humanities and social sciences, we discovered a stable relation between the two groups. Both grew rapidly over the four-year period and their share in total applications did not deviate much. Overall rates of success were also similar. The two groups differed in average project size, with social scientists on the average submitting larger proposals than humanists. More significantly, they also differed in their response to the programme. When applications were related to the size of the academic research community, social scientists showed higher participation rates than scholars in the humanities.

Breakdown of the data by discipline revealed some variation within each group. It was found, for example, that in 1967/68 sociology, political science, anthropology and history showed a more vigorous response to the programme than the other social sciences. Participation by economists appeared particularly low in that year, a fact which can perhaps be explained by the easy availability of contract research to scholars in this field. It was estimated that in 1967/68, 47 per cent of all contract research undertaken by social scientists for federal agencies was carried out by economists. While response was thus uneven, the analysis found little or no evidence for significant variations in success rates. In all probability, most such differences can be explained by variations in the size distribution within disciplines and concern about the existence of biases in the adjudication process would seem to be misplaced at this stage.

When looking at the regional pattern of applications, we discovered some significant changes over the four-year period. The West increased its share in the total, while Quebec's share decreased. However, Quebec's overall



participation in 1967/68, while lower than response in Ontario, was not far from the average. Only the Atlantic region really stayed behind the rest of Canada in programme response. Analysis of participation in 1967/68 thus leads to the conclusion that the regional distribution of applications reflects the characteristics and growth of the scholarly community in different parts of Canada. The level of participation closely parallels the proportion of university teachers holding doctoral degrees while changes in the overall share of applications would seem to be in line with the regional growth pattern of university staff in the social sciences and the humanities.

Every author who comes to the end of his report knows of one recommendation which he can safely make in conclusion. It is always acceptable to point out the need for more research. In calling for further work in this final paragraph, we do not mean to follow a dubious tradition. Rather, we want to point out that the present report will serve the Council best if it becomes the beginning, and perhaps the basis, of an on-going evaluation of programmes. While it is clear that some parts of the analysis could be greatly strengthened if work using the same approach were continued beyond the four-year period considered here, we hope that future work will go beyond our framework to include a discussion of programme results and output. We pointed out in the introduction that we consider our analysis a first step toward a complete evaluation. Now that a historical record of the programme's "take-off" phase and an analysis of distribution are available, the attack can perhaps be directed toward the second major task which must be accomplished for a full understanding of the programme's impact.



### APPENDIX

Table A.1
Research Grants 1967/68

## Applications by Discipline and Project Size\*

	Up t	o \$2500	\$2501	to \$5000	0	ver \$	5000	Total			
	No. of Projects	Amount	No, of Projects***	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	
Anthropology	3	5100	5	18995	11	9	120956	19	17	145051	
Archaeology	4	5713	1	4960	-	-	-	5	5	10673	
Demography	1	1150	-	-	6	2	57700	7	3	58850	
Economics	17	21904	6	24075	17	11	132823	41	. 34	178802	
Fine Arts Architecture Art History Music  Geography  History  Industrial Relations  Language & Literature Asian Classics English French German Italian Slavic (Russian) Spanish	6 7 5 11 75 - 2 8 85 37 13 3 7	11009 9397 5375 17021 111751 - 2600 10093 120325 52482 18206 6552 11416 10923	- 4 1 7 18 - 1 2 8 4 2 1 2 2	16160 5000 25484 76160 - 4560 7966 28815 12564 7670 2850 7100 6454	4 5 - 9 23 4 1 - 6 2 2 -	9 13 1	48925 45681 - 75923 126907 14000 11500 - 50987 13170 13070 - -	10 16 . 6 31 116 4 10 99 43 17 4 9	10 16 6 27 106 1 4 10 97 43 17 4 9	59934 71238 10375 118428 314818 14000 18660 18059 200127 78216 38946 9402 18516 17377	
Law	3	6617	2	7060	6	4	71723	12	9	85400	
Linguistics	4	5542	3	9200	8	6	80081	15	13	94823	
Mathematics	-	-	-	-	2	2	50400	2	2	50400	
Philosophy	24	35565	9	33433	4	2	14848	37	35	83846	
Political Science	35	52871	13	48296	16	13	251157	64	61	352324	
Social Psychology	10	19671	8	29759	21	17	175166	39	35	224596	

See notes on next page.

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Table A.1 (cont.)

	Up t	o \$2500	\$2501		0ver	\$5000	Total			
	No. of Projects	Amount	No. of *** Projects	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount
Sociology	31	54126	13	47491	35	22	260233	80	66	361850
Other Humanities	5	9055	2	7895	3	3	34200	11	10	51150
Other Social Sciences	10	14667	4	17900	11	8	66771	25	22	99338
TOTAL	<u>413</u>	<u>619131</u>	118	449847	196	140	1716221	735	<u>671</u>	2785199

<sup>\*</sup> In the case of successful applications, classification is based on the size of the final award.

### \*\* All projects involve one professor only except:

Economics - 1 project involves 2 professors

Geography - 1 project involves 5 professors

Law - 1 project involves 2 professors

Sociology - 1 project involves 2 professors

Other Humanities - 1 project involves 2 professors.



Table A.2

Research Grants 1967/68

Awards by Discipline and Project Size

	Up to \$25		\$2501	to \$5000		Over	\$5000	Total			
Discipline	No. of Projects	Amount	No. of * Projects	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	
Anthropology	3	5100	5	18995	7	7	83621	15	15	107716	
Archaeology	4	5713	1	4960		-		5	5	10673	
Demography	1	1150	-		1	1	6000	2	2	7150	
Economics	16	20964	6	24075	12	6	88380	35	28	133419	
Fine Arts Architecture Art History Music  Geography History  Industrial Relations  Language & Literature Asian Classics English French German Italian Slavic (Russian) Spanish	4 7 5 11 67 - 1 8 80 37 13 3 5 6	7769 9397 5375 17021 96932 - 1100 10093 111438 52482 18206 6552 8358 8523	- 3 1 5 15 - 1 2 8 4 2 1 2	- 13160 5000 19429 61705 - 4560 7966 28815 12564 7670 2850 7100 6454	1 4 - 6 21 4 1 - 5 1 2 -	1 4 - 6 10 1 - 3 1 2	7965 38505 - 49204 88057 14000  11500 - 35767 7800 13070	5 14 6 22 103 4 3 10 93 42 17 4 7 8	5 14 6 22 92 1 3 10 91 42 17 4 7 8	15734 61062 10375 85654 246694 14000 17160 18059 176020 72846 38946 9402 15458 14977	
Law	3	6617	2	7060	6	4	71723	12	9	85400	
Linguistics	3	4061	3	9200	5	5	67800	11	11	81061	
Mathematics	-	-	-	-	2	2	50400	2	2	50400	
<u>Philosophy</u>	22	32033	8	30388	1	1	6098	31	31	68519	
Political Science	32	47936	9	33352	13	10	203132	54	51	284420	
Social Psychology	10	19671	6	22029	18	14	139566	34	30	181266	

<sup>\*</sup> See note on next page.



Table A.2 (cont.)

	1										
	Up to	\$2500	\$250	1 to \$5000		Over	\$5000	Total			
	No. of Projects	Amount	No. of * Projects *	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	
Sociology	28	46231	11	38311	20	12	133722	60	51	218264	
Other Humanities	4	6555	1	4280	2	2	15600	8	7	26435	
Other Social Sciences	9	12617	1	4355	8	5	33771	18	15	50743	
TOTAL	382	561894	99	<u>374278</u>	140	<u>98</u>	1165681	625	579	2101853	

<sup>\*</sup> Each project involved one scholar only except for the following disciplines where one extra researcher was involved: Economics, Law, Sociology, and Other Humanities.



Table A.3

Research Grants 1968/69

Applications by Discipline and Project Size

	Up t	o \$2500	\$2501	to \$5000		Over	\$5000	Total				
Discipline	No. of Projects*	Amount	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount		
Anthropology	16	40,962	5	23,624	17	13	160,532	38	34	225,118		
Archaeology	10	15,375	1	4,000	7	5	46,379	18	16	65,754		
Demography	5	11,645	1	3,950	2	1.	17,000	8	7	32,595		
Economics	38	107,461	13	50,405	33	19	388,200	84	70	546,066		
Fine Arts Architecture Art History Music	5 15 9	9,251 25,489 11,211	3 6 -	8,378 25,326	1 1 7	1 1 2	18,062 8,083 54,515	9 22 16	9 22 11	35,691 58,898 65,726		
Geography	12	22,792	8	31,372	21	15	186,188	41	35	240,352		
History	127	208,651	27	95,229	16	13	177,895	170	167	481,775		
Industrial Relations	-	-	-	-	-	-	-	-	-	-		
Language & Literature Asian Classics English French German Italian Slavic (Russian) Spanish	7 19 91 46 18 3 11	11,649 31,426 137,931 80,483 25,912 4,800 17,234 25,535	1 - 15 6 2 - 2 4	4,297 - 58,088 20,236 7,390 - 7,625 14,314	2 5 11 2 - 1 1	2 3 8 2 - 1 1	27,770 22,996 75,717 13,612 - 6,500 5,788 5,097	10 24 117 54 20 4 14 20	10 22 114 54 20 4 14	43,716 54,422 271,736 114,331 33,302 11,300 30,647 44,946		
Law	8	10,394	4	15,791	13	8	149,332	25	20	175,517		
Linguistics	13	19,934	7	27,499	16	15	214,501	36	35	261,934		
Mathematics	-	-	2	7,755	-	-		2	2	7,755		
Philosophy	21	29,673	4	13,930	2	2	19,904	27	27	63,507		
Political Science	35	61,253	8	31,151	17	11	200,596	61	54	293,000		
Social Psychology	11	24,978	12	48,465	21	19	239,976	44	42	313,419		
Sociology	31	53,223	18	73,004	42	33	512,835	91	82	639,062		
Other Humanities	4	6,122	1	5,000	-	-	-	5	5	11,122		
Other Social Sciences	3	4,150	2	8,912	2	2	34,240	7	7	47,302		
TOTAL	572	997,534	152	585,741	242	178	2,585,718	967	902	4,168,993		

<sup>\*</sup> Each project involved one scholar only except in Political Science. For other note see Table A.1 (p.71).



# Table A.4 Research Grants 1968/69

### Awards by Discipline and Project Size

	Up to	\$2500	\$2501	to \$5000		Over	\$5000	Total				
Discipline	No. of * Projects*	Amount	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No, of Projects	Amount		
Anthropology	12	21,380	5	19,091	14	10	123,498	31	27	163,969		
Archaeology	10	15,375	1	4,000	3	3	23,911	14	14	43,286		
Demography	5	11,645	-	-		-	-	5	5	11,645		
Economics	35	63,805	11	41,865	25	13	157,612	71	59	263,282		
Fine Arts Architecture Art History Music	4 13 8	7,251 22,939 10,785	1 5 -	2,585 18,695	- 1 7	- 1 2	7,527 44,665	5 19 15	5 19 10	9,836 49,161 55,450		
Geography	10	18,392	7	25,505	14	10	117,760	31	27	161,657		
History	114	187,991	24	82,127	13	10	98,719	151	148	368,837		
Industrial Relations	-	-	-	-	-	-	-	-	-	-10		
Language & Literature Asian Classics English French German Italian Slavic (Russian) Spanish	5 18 80 45 16 3 11	9,277 28,926 123,556 68,800 21,905 4,800 17,234 23,060	1 - 12 5 - - 2 4	4,297 - 40,278 17,336 - 7,625 14,314	2 4 9 1 - 1	2 2 6 1 - 1	27,270 16,833 59,089 5,600 - 6,500	8 22 101 51 16 4 13 17	8 20 98 51 16 4 13	40,844 45,759 222,923 91,736 21,905 11,300 24,859 37,374		
Law	8	10,394	3	12,156	13	8	149,332	24	19	171,882		
Linguistics	12	17,434	6	20,777	12	11	174,775	30	29	212,986		
Mathematics	-	-	1	4,355	-	-	-	1	1	4,355		
Philosophy	19	24,726	3	9,260	1	1	12,333	23	23	46,319		
Political Science	29	44,258	6	21,355	13	8	143,676	49	43	209,289		
Social Psychology	9	19,917	10	41,540	17	15	181,843	36	34	243,300		
Sociology	29	47,993	14	53,783	30	23	276,594	73	66	378,370		
Other Humanities	3	5,322	-	-	-	-	-	3	3	5,322		
Other Social Sciences	3	4,000	1	3,912	-	-	-	4	4	7,912		
TOTAL	<u>514</u>	831,165	122	444,856	180	127	1,627,537	817	763	2,903,558		

<sup>\*</sup> Each project involved one scholar only except in Political Science.



Table A.5

Research Grants 1967/68

Applications by University of Affiliation and Project Size\*

	Up	to \$2500	\$250	1 to \$5000	Ove	er \$50	000	Total			
University of Affiliation	No. of Projects	Amount	No. of Projects**	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	
BRITISH COLUMBIA U.B.C. Simon Fraser Victoria Other post-secondary	29 11 3 1	44,237 12,979 5,065 400	3 2 -	12,529 12,366 6,180	7 7 2 -	6 4 2	61,308 33,051 17,000	21	39 18 7 1	118,074 58,396 28,245 400	
PRAIRIES Alberta Brandon Calgary Lethbridge Manitoba Saskatchewan	10 2 21 5 15	16,825 1,400 35,067 6,725 22,508 28,925	9 - 13 - 3 3	33,938 - 47,619 - 10,966 10,210	13 - 6 - 8 1	13 - 6 - 6 1	147,688 - 41,915 - 61,716 7,250	2 40 5 26	32 2 40 5 24 21	198,451 1,400 124,601 6,725 95,190 46,385	
ONTARIO  Brock Carleton Guelph Lakehead Laurentian McMaster Ottawa Saint Paul Queen's Royal Military College Toronto St. Michael's Victoria Trent Waterloo Waterloo Lutheran Western Ontario Huron Windsor York Other post-secondary	4 12 8 - 2 11 12 2 20 3 40 - 1 5 12 2 22 1 7 18 2	5,922 18,874 9,385 - 2,555 20,432 19,302 3,050 25,156 4,061 56,393 - 1,556 8,045 20,548 4,638 26,158 1,102 9,705 26,667 2,640	- 2 6 1 2 3 4 - 4 - 9 1 - 6 - 1 6 1	6,931 21,534 4,200 8,881 9,825 14,780 - 17,419 - 37,528 2,750 - 15,675 - 25,724 - 4,171 18,706 3,885	1 4 2 - 7 6 - 10 - 18 - 7 1 7 1 7	1 1 2 - 5 5 - 15 - 11 4 - 1 8 1	31,665 8,000 25,055 - 81,160 48,501 - 99,831 - 160,522 - 5,800 - 45,582 5,750 51,890 - 9,800 166,391 9,645	18 16 1 4 21 22 2 34 3 68 1 2 5 23 3 3 5 1 11 41	5 15 16 1 4 19 21 2 29 3 64 1 2 5 23 3 3 2 1 9 32 4	37,587 33,805 55,974 4,200 11,436 111,417 82,583 3,050 142,406 4,061 254,443 2,750 7,356 8,045 81,805 10,388 103,772 1,102 23,676 211,764 16,170	

See notes on next page.



Table A.5 (cont.)

	Up to	\$2500		to \$5000		Over	\$5000	Total			
University of Affiliation	No. of Projects	Amount	No. of Projects**	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	
QUEBEC Laval McGill Montreal Loyola Sherbrooke Sir George Williams	9 33 14 3 1 4	12,805 50,864 20,930 2,775 2,117 7,572	2 6 5 - 2	7,950 22,848 18,637 - - 9,570	4 11 27 - 4 1	4 10 14 - 2 1	81,225 85,978 204,283 - 51,500	15 52 46 3 5 7	15 49 33 3 3 7	101,980 159,690 243,850 2,775 53,617 25,222	
ATLANTIC  Dalhousie  Memorial  Moncton  Mount Allison  New Brunswick  Nova Scotia	5 3 1 1 11	7,085 6,500 1,900 2,326 12,912	1 1 1 -	3,200 3,600 3,045 - 3,615	2 1 - 1	2 1 - 1	19,130 7,500 - - 20,350	8 5 2 1	8 5 2 1 13	29,415 17,600 4,945 2,326 36,877	
Technical College Prince of Wales St. Francis Xavier Saint Mary's Other post-secondary	2 1 2 1 1	4,194 2,400 2,280 800 . 2,200	- 1 -	- 3,000 - -	-		-	2 1 3 1 1	2 1 3 1	4,194 2,400 5,280 800 2,200	
OTHER	23	39,151	11	48,565	16	10	118,655	51	44	206,371	
TOTAL	413	619,131	118	449,847	196	140	1,716,221	735	<u>671</u>	2,785,199	

<sup>\*</sup> In the case of successful applications, classification is based on the size of the final award.

Alberta - 1 project involved 5 scholars Toronto - 1 project involved 2 scholars

McGill - 2 projects involved 2 scholars

Other - 1 project involved 2 scholars.

<sup>\*\*</sup> All projects involve one scholar only except:

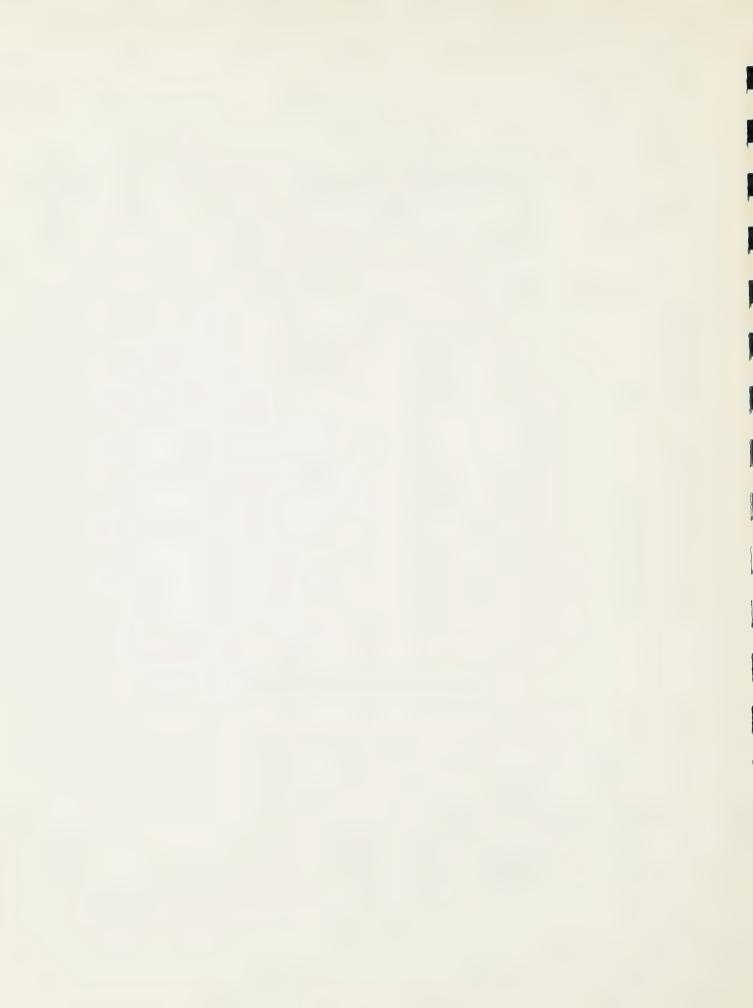


Table A.6

Research Grants 1967/68

Awards by University of Affiliation and Project Size

	Up to	o \$2500	\$2501	to \$5000	Ove	er \$50	000		Total	
University of Affiliation	No. of Projects	Amount	No. of Projects*	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount
BRITISH COLUMBIA U.B.C. Simon Fraser Victoria Other post-secondary  PRAIRIES. Alberta Brandon Calgary Lethbridge Manitoba Saskatchewan	26 11 1 10 18 4 14 15	38,189 12,979 2,500 400 16,825 400 30,977 5,350 21,308 23,925	4 3 2 - 8 - 12 - 2 2	12,529 12,366 6,180 - 31,213 - 44,619 - 7,966 7,210	6 2 2 - 11 - 2 - 4	5 2 2 2 - 11 - 3 1	48,708 15,397 17,000 - 102,993 - 12,254 - 21,666 7,250	36 16 5 1 29 1 32 4 20 18	35 16 5 1 29 1 32 4 19 18	99,426 40,742 25,680 400 151,031 400 87,850 5,350 50,940 38,385
ONTARIO Brock Carleton Guelph Lakehead Laurentian McMaster Ottawa Saint Paul Queen's Royal Military College Toronto St. Michael's Victoria Trent Waterloo Waterloo Lutheran Western Ontario Huron Windsor York Other post-secondary	3 11 7 1 11 11 2 20 3 40 - 1 5 12 1 22 1 7 15 2	4,202 17,393 8,385 - 400 20,432 17,925 3,050 25,156 4,061 56,393 - 1,556 8,045 18,703 2,220 26,158 1,102 9,705 21,567 2,640	- 2 5 1 2 3 2 - 4 - 9 1 - 3 - 5 - 1 5 1	6,931 21,534 4,200 8,881 9,825 6,950 - 17,419 - 37,528 2,750 - 10,675 - 21,424 - 4,171 16,072 3,885	- 4 3 5 - 10 - 18 - 7 - 7 - 7 - 3 15 1	- 1 - 3 4 - 5 - 15 - 1 - 7 - 4 - 1 6 1	8,000 - - 60,997 38,705 - 99,831 - 160,522 - 5,800 - 45,582 - 51,890 - 9,800 139,621 9,645	3 17 13 1 3 17 18 2 34 3 68 1 2 5 22 1 34 1 11 35 4	3 14 13 1 3 17 17 2 29 3 64 1 2 5 22 1 31 1 9 26 4	4,202 32,324 29,919 4,200 9,281 91,254 63,580 3,050 142,406 4,061 254,443 2,750 7,356 8,045 74,960 2,220 99,472 1,102 23,676 177,260 16,170

See note on next page



Table A.6 (cont.)

	Up t	o \$2500	\$2501	to \$5000		0ver	\$5000	Total		
University of Affiliation	No. of Projects	Amount	No. of * Projects*	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount
QUEBEC Laval	9	12,805	2	7,950	3	3	72,355	14	14	93,110
McGill	30	42,928	6	21,368	6	6	54,838	44	42	119,134
Montreal	14	20,930	4	15,307	14	8	88,277	32	26	124,514
Loyola	3	2,775	_	-	-	_	-	3	3	2,775
Sherbrooke	1	2,117	_	_	4	2	51,500	5	3	53,617
Sir George Williams	3	5,072	1	4,960	-	-	-	4	4	10,032
ATLANTIC										
Dalhousie	5	7,085	1	3,200	1	1	10,000	7	7	20,285
Memorial	3	6,500	1	3,600	-	-		4	4	10,100
Moncton	1	1,900	-	Apre	-	-	-	1	1	1,900
Mount Allison	1	2,326	-		-	-	-	1	1	2,326
New Brunswick	11	12,912	1	3,615	1	1		12	12	16,527
Nova Scotia Technical										
College	2	4,194	-	-	-	-	-	1	1	2,400
Prince of Wales	1	2,400		-	-	-	-	1	1	2,400
St. Francis Xavier	1	780	1	3,000	-	_	-	2	2	3,780
Saint Mary's	1	800	-	-	-	~	-	1	1	800
Other post-secondary	1	1,400	-	-	-	-	-	1	1	1,400
OTHER	19	33,024	4	16,950	10	4	33,050	34	27	83,024
TOTAL	382	561,894	99	374,278	140	98	1,165,681	625	<u>579</u>	2,101,853

<sup>\*</sup> Each project involved one scholar only with the following exceptions:

<sup>10</sup> scholars were involved in the University of Toronto's 9 projects of \$2,500 to \$5,000;

<sup>8</sup> scholars were involved in the McGill University's 6 projects of \$2,500 to \$5,000:

<sup>21</sup> scholars were involved in the 20 projects of less than \$2,500 which are classified as "other"



Table A.7

### Research Grants 1968/69

### Applications by University of Affiliation and Project Size

	Up	to \$2500	\$250	l to \$5000	0	ver \$5	000		Tota	1
University of Affiliation	No. of * Projects	Amount	No. of ** Projects	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount
BRITISH COLUMBIA British Columbia Notre Dame Simon Fraser Victoria Other post-secondary  PRAIRIES Alberta Brandon Calgary Lethbridge Manitoba	36 1 17 9 2 23 - 24 2 8	62,421 2,000 30,519 29,946 3,650 42,538 - 43,141 3,500 11,573	14 - 12 4 - 5 - 8 1	61,115 - 48,208 12,535 - 18,476 - 33,062 3,800 28,829	1 5 - 30 - 7 1 7	10 - 1 5 - 21 - 6 1 6	108,443 - 6,210 54,251 - 344,637 - 63,930 5,879 95,504	4 22	60 1 30 18 2 49 - 38 4 21	231,979 2,000 84,937 96,732 3,650 405,651 - 140,133 13,179 135,906
St. Paul's Saskatchewan Winnipeg	17 2	29,375 4,000	1 2 -	4,130 7,862	2	2	33,686	1 21 2	1 21 2	4,130 70,923 4,000
ONTARIO Brock Carleton Guelph Lakehead Laurentian McMaster Ottawa Saint Paul Queen's Royal Military	2 18 14 2 4 17 23 2 22	2,010 65,112 22,850 3,076 4,683 26,204 43,361 3,400 38,606	1 2 4 - 2 6 5 - 6	3,660 6,245 14,112 - 9,950 24,559 18,021 - 25,218	1 11 - - 5 5 6 - 10	1 9 - 2 4 3	27,010 99,013 - 40,670 33,790 37,007 - 66,290	4 31 18 2 11 28 34 2 39	4 29 18 2 8 27 31 2 32	32,680 170,370 36,962 3,076 55,303 84,553 98,389 3,400 130,114
College Toronto St. Michael's Trinity Victoria Trent Waterloo St. Jerome's Waterloo Lutheran Western Ontario	7 67 1 2 9 13 15 1 2 28	9,528 108,891 1,500 3,976 10,924 23,593 32,140 2,500 3,334 42,474	16 1 - 1 - 7 - 3	62,893 2,522 3,912 - 28,939 - 10,680	21 - 1 1 9 - 4	17 - 1 1 1 8 - 4	265,110 - 6,100 18,500 93,201 - 35,244	2 2 11	7 100 2 2 11 14 30 1 2 35	9,528 436,894 4,022 3,976 20,936 42,093 154,320 2,500 3,334 88,398



Table A.7 (cont.)

Up to \$2500			\$250	1 to \$5000	0	ver \$5	000	Total			
University of Affiliation	No. of * Projects	Amount	No. of *** Projects	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	
Huron Windsor York Other post-secondary	1 12 24 2	1,008 17,550 39,410 2,900	7	- 26,447	- 5 13	3 7	22,186 151,552	1 17 44 2	1 15 38 2	1,008 39,736 217,409 2,900	
QUEBEC Bishop's Laval McGill Montreal Loyola Marianopolis Sherbrooke Sir George Williams Other post-secondary	4 14 35 15 4 1 - 5	6,398 25,674 53,897 23,602 7,051 2,415 - 9,144 5,051	6 9 1	- 22,610 31,774 - - - 2,989	- 6 23 20 1 1 2 4	5 15 14 1 1 2 4	73,670 210,691 301,256 9,000 5,860 24,600 84,698	4 20 64 44 5 2 2 9	4 19 56 38 5 2 2 9 4	6,398 99,344 287,198 356,632 16,051 8,275 24,600 93,842 8,040	
ATLANTIC Acadia Dalhousie Memorial Moncton Mount Allison New Brunswick Nova Scotia Technical Prince of Wales St. Francis Xavier Saint Mary's Other post-secondary	1 7 4 2 2 12 - 1 2 1	2,495 10,290 4,275 5,000 4,220 15,453 - 1,006 1,271 2,500	2 3 - 2 - 2 2	5,352 9,660 - 5,203 - 6,142	1 7 2 - - -	1 3 2	8,799 32,375 36,891 - - - -	1 10 14 4 2 14 - - 3 2 1	1 10 10 4 2 14 - - 3 2 1	2,495 24,441 46,310 41,891 4,220 20,656 - 7,148 1,271 2,500	
OTHER	30	46,099	12	46,796	17	14	189,665	59	56	282,560	
TOTAL	<u>572</u>	997,534	<u>152</u>	585,741	242	<u>178</u>	2,585,718	967	902	4,168,993	

<sup>\*</sup> All projects involved one scholar, except Queen's where one project involved 2 scholars.

<sup>\*\*</sup> All projects involved one scholar only. For other note see table A.1 (p. 71).



Table A.8

Research Grants 1968/69

Awards by University of Affiliation and Project Size

	Up to \$2500		\$2501 to \$5000		Over \$5000			Total		
University of Affiliation	No. of Projects*	Amount	No. of ** Projects	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount
BRITISH COLUMBIA										
British Columbia	36	62,211	13	50,082	6	5	33,040	55	54	145,333
Notre Dame	1	1,920	-	-	_		33,040	1	1	1,920
Simon Fraser	15	27,641	8	30,342	_	_		23	23	57,983
Victoria	7	13,401	2	6,145	4	4	44,582	13	13	64,128
Other post-secondary	2	3,650	-	-	-	-	-	2	2	3,650
PRAIRIES										
Alberta	19	36,373	3	9,828	18	12	144,604	40	34	190,805
Brandon	_	-	_	-	_			40	-	190,000
Calgary	22	38,467	5	19,987	6	5	50,986	33	32	109,440
Lethbridge	2	3,500	1	3,800	-	-	50,900	3	3	7,300
Manitoba	8	11,573	6	21,575	3	3	35,107	17	17	68,255
St. Paul's	_		_	-	_	-	55,107	1 - '	_	00,2,5
Saskatchewan	12	19,738	1	2,862	1	1	5,426	14	14	28,026
Winnipeg	-	-	-	-	-	-	J, 720 ≈	-	-	-
ONTARIO										
Brock	2	2,010	1	3,660	1	1	9,000	4	4	14,670
Carleton	17	24,538	2	6,245	8	7	69,965	27	26	100,748
Guelph	10	15,658	4	14,025	_	_	_	14	14	29,683
Lakehead	-	-	-	-	_	-	_	_	_	_
Laurentian	4	4,683	2	8,240	4	1	24,840	10	7	37,763
McMaster	17	26,204	6	21,359	3	2	15,920	26	25	63,483
Ottawa	22	40,388	5	18,021	5	2	18,667	32	29	77,076
Saint Paul	1	1,900	-	-	-	-	-	1	1	1,900
Queen's	20	31,148	6	21,718	9	3	44,900	36	29	97,766
Royal Military College	7	9,528	-	-	-	-	-	7	7	9,528
Toronto	63	103,441	16	61,071	20	16	230,909	99	95	395,421
St. Michael's	1	1,500	1	2,522	-	-	- )	2	2	4,022
Trinity	2	3,976	-	-	-	-	-	2	2	3,976
Victoria	8	8,394	1	3,912	1 1	1	6,100	10	10	18,406
Trent	13	23,593	-	-	-	-		13	13	23,593
Waterloo	13	19,823	6	24,384	7	6	55,778	26	25	99,985
St. Jerome's Waterloo Lutheran	1	2,500	-	-	-	-	-	1	1	2,500
Waterloo Lutheran Western Ontario	2	2,904	-	7 700			-	2	2	2,904
Huron	27	41,803	2	7,780	4	4	34,744	33	33	84,327
Windsor	11	16 100	-	-	-	2	12 2/1	1.5	1.0	
York	23	16,190	7	26 //7	4	2 5	13,341	15	13	29,531
		38,239	7	26,447	9	)	78,642	39	35	143,328
Other post-secondary	1	1,450	-	-	-	-	-	1	1	1,450

See notes on next page.



Table A.8 (cont.)

					,						
	Up to \$2500		\$2501	to \$5000		Over \$5000			Total		
University of Affiliation	No. of Projects*	Amount	No. of ** Projects	Amount	No. of Scholars	No. of Projects	Amount	No. of Scholars	No. of Projects	Amount	
QUEBEC Bishop's Laval McGill Montreal Loyola Marianopolis Sherbrooke Sir George Williams Other post-secondary	3 12 32 14 4 1 - 4 3	4,813 20,649 49,587 21,602 7,051 2,415 - 7,602 5,051	- - 5 8 - - - 1	- 18,270 28,506 - - - 2,989	6 21 17 1 - 1	5 13 13 1 - 1	73,670 192,300 239,220 9,000 - 15,750 7,000	3 18 58 39 5 1 1 5	3 17 50 35 5 1 1 5	4,813 94,319 260,157 289,328 16,051 2,415 15,750 14,602 8,040	
ATLANTIC Acadia Dalhousie Memorial Moncton Mount Allison New Brunswick Nova Scotia Technical College Prince of Wales St. Francis Xavier Saint Mary's Other post-secondary	1 6 4 2 2 11	2,495 7,800 4,275 5,000 4,220 13,646	2 2 - 2	5,352 6,660 - 5,203 - 3,368 -	1 7	1 3	8,799 32,375 - - - - - -	1 9 13 2 2 13	1 9 9 2 2 13	2,495 21,951 43,310 5,000 4,220 18,849  - 4,374 1,271	
OTHER	23	34,338	3	10,503	12	9	132,872	38	35	177,713	
TOTAL	<u>514</u>	831,165	122	444,856	180	127	1,627,537	817	<u>763</u>	2,903,558	

<sup>\*</sup> All projects involved one scholar only except Queen's where one project involved 2 scholars.

<sup>\*\*</sup> All projects involved one scholar only.

